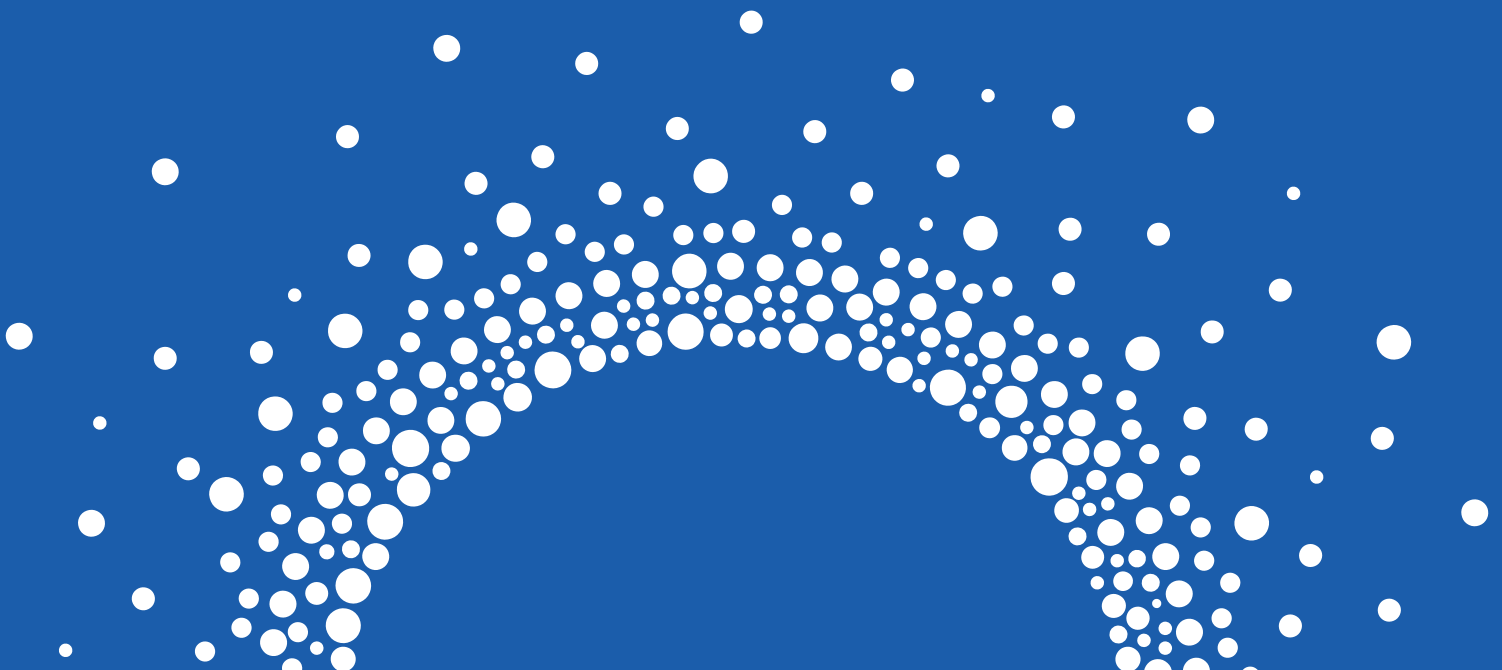


Inspiring & Enabling Life Science Innovation





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# COMPANY PROFILE |



VDO Biotech Co., Ltd. is a high-tech enterprise dedicated to innovative microsphere technologies and the production of a variety of high-quality microsphere products for global customers. VDO was founded in 2014, and is headquartered in the BioBAY of Suzhou Industrial Park, China, with a total facility area of over 10,000 square meters. Committed to R&D and innovation, We hold 6 authorized patents and 17 pending patents, and have successfully acquired high-tech enterprise certification.

Led by senior scientists from world-renowned universities, VDO's microsphere scientific team has established an advanced technology platform and a continuously innovative R&D system. We have always adhered to high standards of production management, and our manufacturing facilities have acquired ISO 9001:2015 certification. Our portfolio covers magnetic microspheres, latex microspheres, color-dyed microspheres, fluorescent microspheres, flow cytometry microspheres, standard microspheres, and microsphere-related services, which can be widely used in molecular diagnosis and immunodiagnosis. VDO has been endorsed by users all over the world for our high-quality products and services, and we are constantly creating new legends of core suppliers in the IVD field with higher-quality microsphere products.

VDO Biotech is deeply engaged in the large-scale microsphere production and application for *in vitro* diagnostic. We not only provide microspheres of uniform and controllable particle size, nano-sized & micro-sized microspheres with high quality and a variety of surface functional groups, but also provide customized services of various types of microspheres, large-scale microsphere conjugation services with antibodies or nucleic acid probes, OEM services for microspheres and intermediates, and complete solutions for microsphere applications.

With the mission of making biological diagnosis more accurate, VDO will continue to move forward, innovate constantly, and strive to become the world's leading supplier of biological diagnostic microspheres. Our dedicated staff is your reliable partner for the solution of microsphere-related applications!



## Enterprise Cultures

### Vision

Inspiring & Enabling Life Science Innovation

### Values

Preciseness Innovation Collaboration Openness



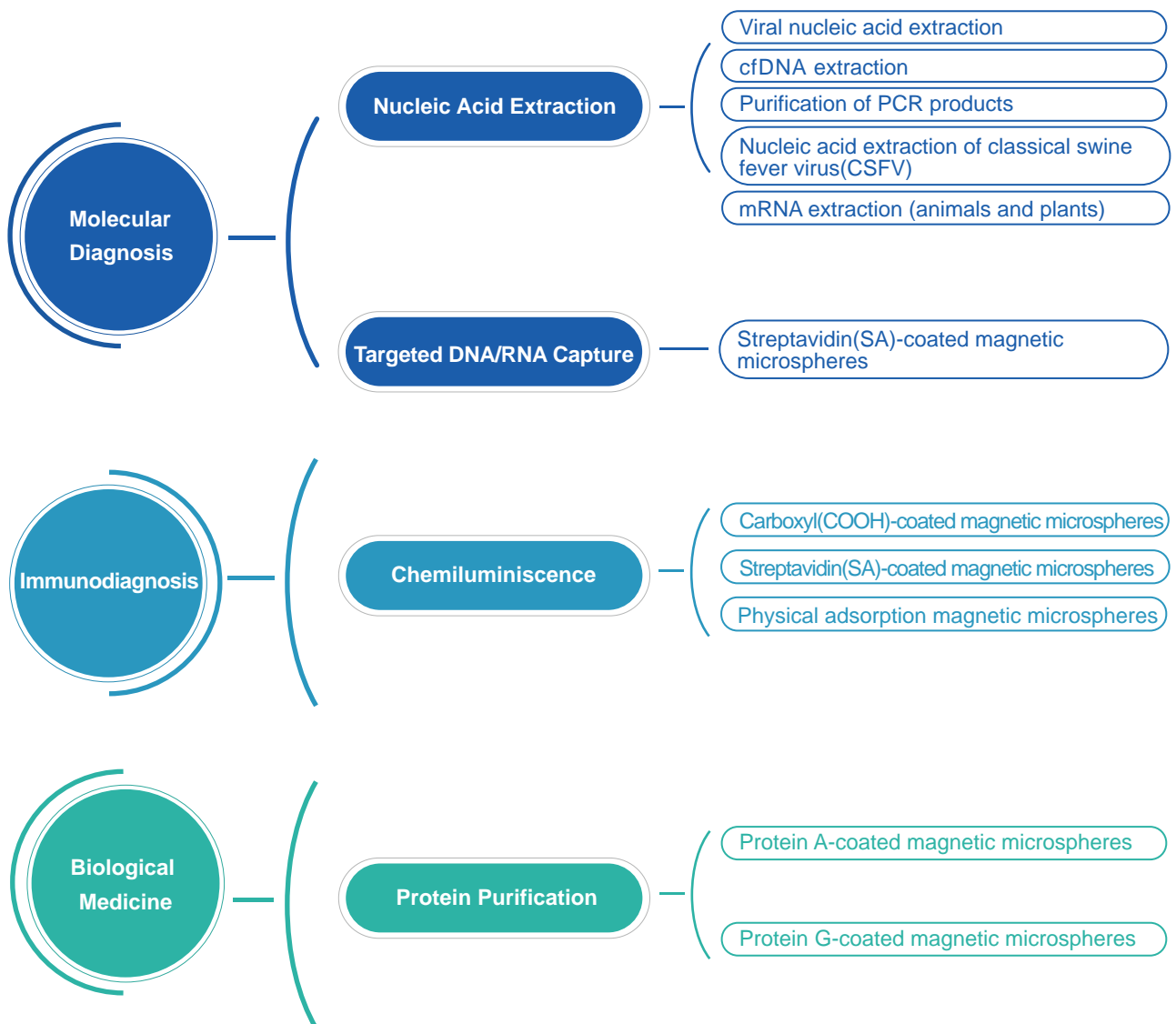
## Microsphere Overall Solutions

- Microsphere OEM services for global customers
- Large scale protein-microsphere conjugation services
- OEM services of microsphere intermediates
- High quality microspheres of nanometer and micrometer level
- Customized microsphere services
- Overall solution for microsphere applications
- Biomacromolecule separation and purification services
- Development of separation and purification process for biological macromolecules
- Optimization of separation and purification process for biological macromolecules
- Overall solution for separation and purification of biological macromolecules

# Microspheres Selection Guide

Due to the superparamagnetism, magnetic microspheres have been widely used in the field of *in vitro* diagnostics (IVD) and biological medicine, such as nucleic extraction, chemiluminescent and protein purification.

## For Magnetic Microspheres

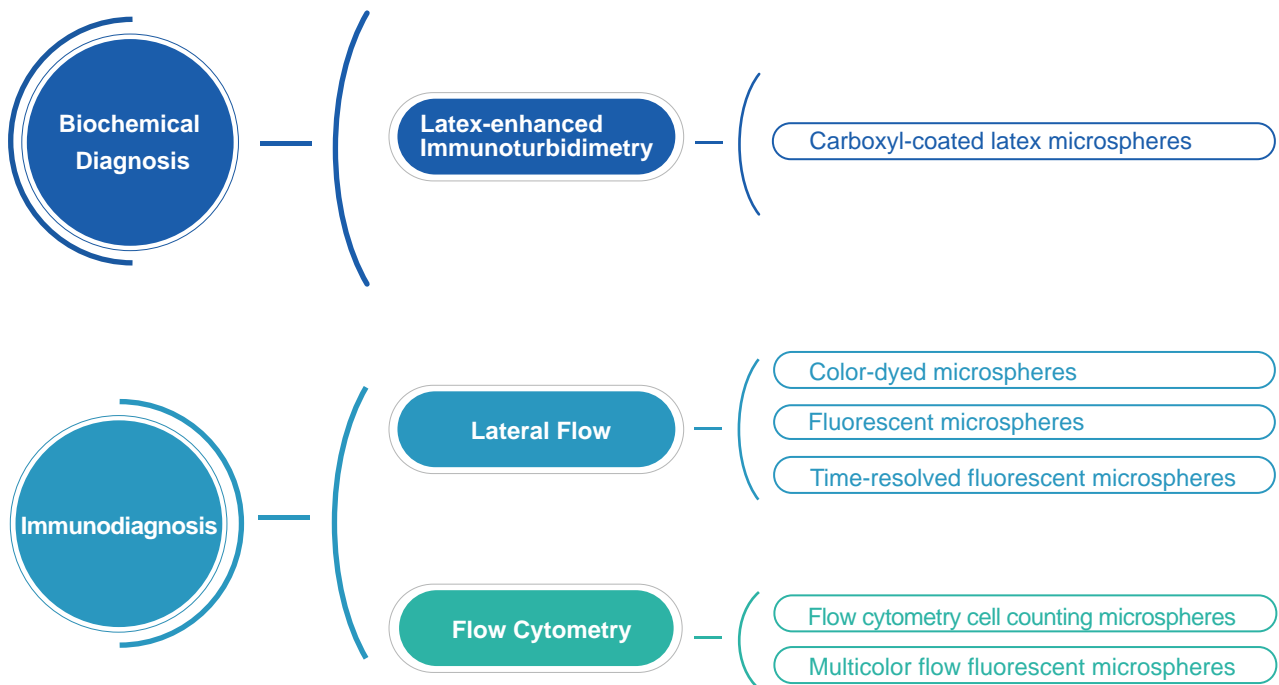


# Microspheres Selection Guide

In addition to magnetic microspheres, our polymer microspheres have been widely used in the field of *in vitro* diagnostics (IVD), e.g., latex-enhanced immunoturbidimetry, lateral flow, flow cytometry, homogeneous chemiluminescent immunoassay.

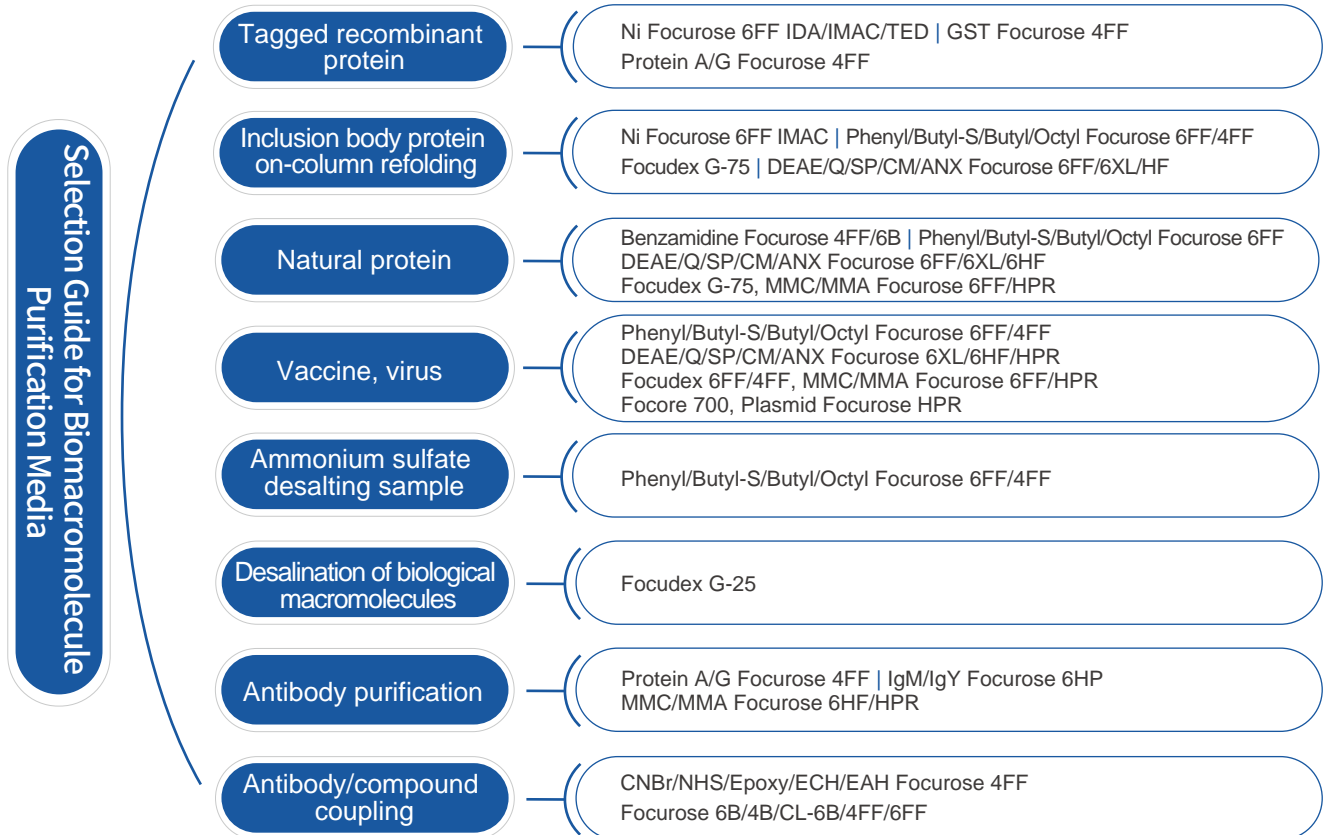
## For Polymer Microspheres

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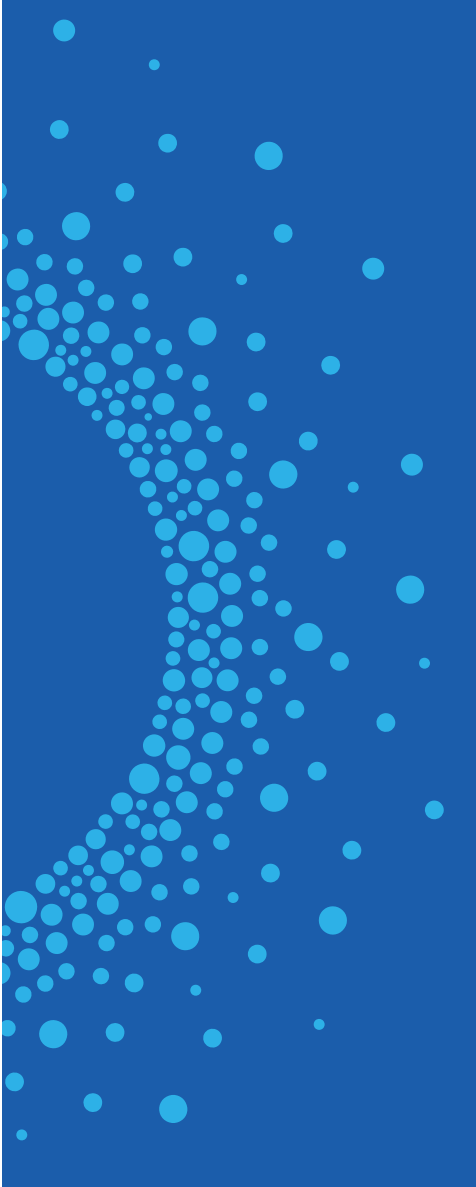
# Microspheres Selection Guide

## For Chromatography Media



★ ★ ★ Linear flow rate (cm/h)=flow rate (ml/min) × 60/square of column radius (cm) × π





# Magnetic Microspheres

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# Nucleic Acid Extraction Magnetic Microspheres

This series of magnetic microspheres have excellent capture ability and elution efficiency for nucleic acids, and are specially designed for nucleic acid extraction and purification. VDO Biotech's magnetic microsphere series integrates the advantages of excellent dispersion, low non-specific binding and fast magnetic response. It is suitable for nucleic acid extraction of various sample types and could meet the requirements of automatic equipment extraction. It is an ideal choice for nucleic acid extraction and purification of biological samples.

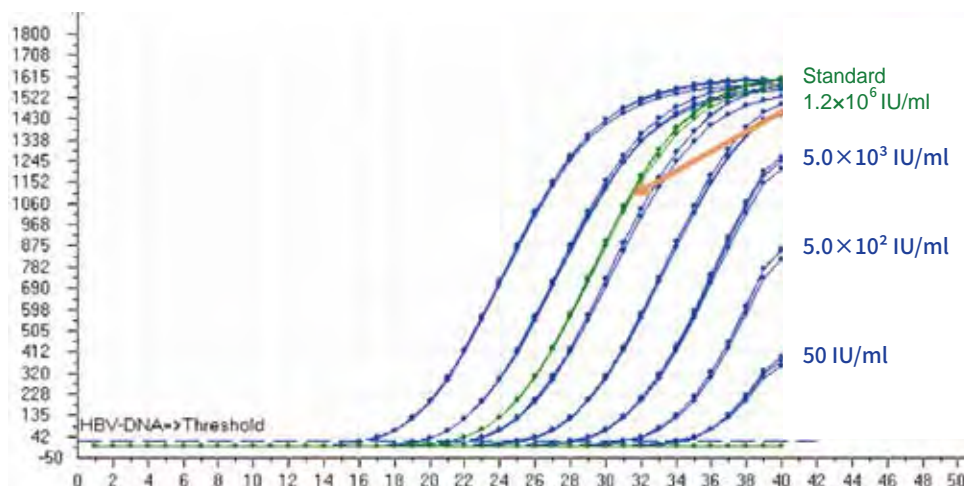


- Large specific surface area: enhanced binding capacity
- Superparamagnetic: excellent resuspension
- Special surface modifications: improved adsorption capacity and easier elution
- Rapid magnetic response: fast magnetic adsorption speed, no magnetic residue
- Production capacity is up to >100L/batch, batch-to-batch consistency: high reproducibility
- Variety selections of diameters and surface groups: applicable to various types of samples



- Composition: Iron oxide ( $\text{Fe}_3\text{O}_4$ )
- Particle size: 50nm-2 $\mu\text{m}$
- Dispersion medium: DI water
- Additive: Contains trace amount of surfactant
- Particle refractive index: NA
- Storage condition: Store at 2-25 $^\circ\text{C}$ , do not freeze

## Case Study: Nucleic acid extraction using VDO Biotech's magnetic microspheres



- ▲ HBV samples were diluted to different concentrations with serum. The sample can still be detected stably when the concentration is as low as 50 IU/ml.

## Ordering Information:

### Magnetic Microspheres for Nucleic Acid Extraction

Cat. No.	Color	Surface Groups	Solids	Selected Applications
MS02H	Brownish black	OH	2.5%	Viral nucleic acid extraction
MA200H	Brownish black	OH	2.5%	cfDNA extraction PCR products purification
MA0308C	Brownish yellow	COOH	2.5%	Viral nucleic acid extraction
MA0309C	Brownish yellow	COOH	2.5%	Nucleic acid extraction of swine fever virus
MS05HC	Brownish yellow	OH	2.5%	Viral nucleic acid extraction cfDNA extraction Purification of PCR products
MS05HE	Brownish yellow	OH	3.0%	Viral nucleic acid extraction
MS04T	Brownish yellow	Oligo(dT)	1.0%	mRNA extraction from animal and plant samples
MS02HA	Brownish black	OH	2.5%	Virus, pseudovirus particles, small fragment nucleic acid extraction

The magnetic microsphere products above are all available in 10ml, 100ml, and 1L.

### Supporting Raw Material

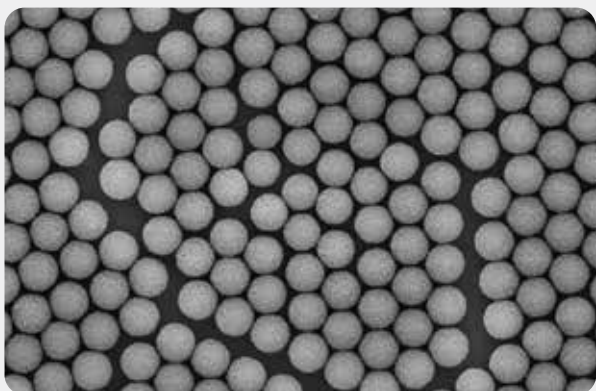
Cat.No.	Product Name	Form	CAS	Use	Size
VYJ13009-1Kg	Guanidine Hydrochloride	White crystal	50-01-1	Strong protein allosteric agent	1Kg
VYJ13009-25Kg					25Kg
VYJ13012-1Kg	Guanidine Isothiocyanate	White crystal	593-84-0	Strong protein allosteric agent	1Kg
VYJ13012-25Kg					25Kg
PK0030	Proteinase K	White lyophilized powder	39450-01-6	Cell lysis	30mg
PK0100					100mg
PK1000					1000mg
PK1050					50g

### Supporting Consumables

Product Name	Size
96-Well Deep Well Plates	A variety of packaging specifications are available.
96-Well Plates	
96-Well Magnetic Rod Cover	
8-Well Magnetic Rod Cover	
96 Sealing Film	

# Streptavidin-coated Magnetic Microspheres

This series of magnetic microspheres coated with streptavidin(SA), which can effectively binds biotinylated derivatives.



## Features

- Superparamagnetic: excellent resuspension
- Hydrophilic surface: low non-specific binding
- Uniform diameter: CV<5%, high reproducibility
- Coated with streptavidin(SA): effectively binds biotinylated derivatives
- Large scale production, batch-to-batch consistency: superior quality with consistent test results



## Technical Parameters

- **Composition:** Iron oxide ( $Fe_3O_4$ )
- **Uniformity:** CV<5%
- **Particle Size:** 0.6 $\mu$ m, 1 $\mu$ m, 3 $\mu$ m
- **Additive:** Contains trace amount of surfactant
- **Surface Groups:** Streptavidin (SA)
- **Storage condition:** Store at 2-8 $^{\circ}$ C, do not freeze
- **Dispersion Medium:** Magnetic microspheres preservation solution

## Magnetic Microspheres for Targeted DNA/RNA Capture

### Streptavidin-coated Magnetic Microspheres

Cat. No.	Particle Size	Color	Surface Groups	Solids	Size
NMP0600SA	0.6 $\mu$ m	Brownish yellow	SA	1.0%	10ml, 100ml, 1L
NMP1001SA	1 $\mu$ m	Brownish yellow	SA	1.0%	10ml, 100ml, 1L
NMP1003SA	3 $\mu$ m	Brownish yellow	SA	1.0%	10ml, 100ml, 1L

### Carboxyl(COOH)-coated Magnetic Microspheres

Cat. No.	Particle Size	Color	Surface Groups	Solids	Size
NMP0600CA	0.6 $\mu$ m	Brownish yellow	COOH	2.5%	10ml, 100ml, 1L
NMP1001CA	1 $\mu$ m	Brownish yellow	COOH	2.5%	10ml, 100ml, 1L
NMP1003CA	3 $\mu$ m	Brownish yellow	COOH	2.5%	10ml, 100ml, 1L
NMP1005CA	5 $\mu$ m	Brownish yellow	COOH	2.5%	10ml, 100ml, 1L

# Magnetic Microspheres for Chemiluminescent

VDO Biotech's magnetic microspheres for chemiluminescent have superparamagnetism and moderate magnetic content, excellent resuspendability and fast magnetic response. With our advanced microsphere synthesis technology, proprietary surface coating process, and variety selections of functional groups, our magnetic microspheres provide comprehensive solutions to meet customers' specific needs of different technology route development. The high-load functional groups guarantee the binding capacity, and this series of products show outstanding performance in the field of immunoassay.



- High magnetic content: fast magnetic response
- Large scale production capacity, up to 50L/batch: scalable and stable production
- Uniform diameter, stable and controllable surface functional groups: high reproducibility
- Superparamagnetism and proper density: ensures good resuspension and suspension time
- Sufficient surface functional groups: efficiently couple with sufficient amount of target protein

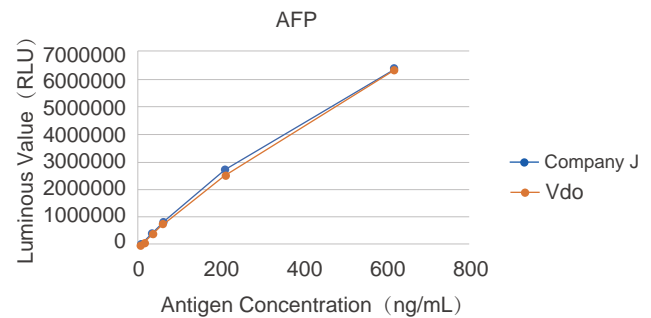


- **Composition:** Iron oxide ( $\text{Fe}_3\text{O}_4$ )
- **Particle Size:** 0.6 $\mu\text{m}$ , 1 $\mu\text{m}$ , 3 $\mu\text{m}$
- **Additive:** Contains trace amount of surfactant
- **Uniformity:** CV<5%
- **Density:** 1.05-3.38g/cm<sup>3</sup>
- **Surface Functional Groups:** Carboxyl (COOH) / Streptavidin (SA)

## Case Studies

### Detection of alpha-fetoprotein (AFP) by magnetic microsphere chemiluminescence method

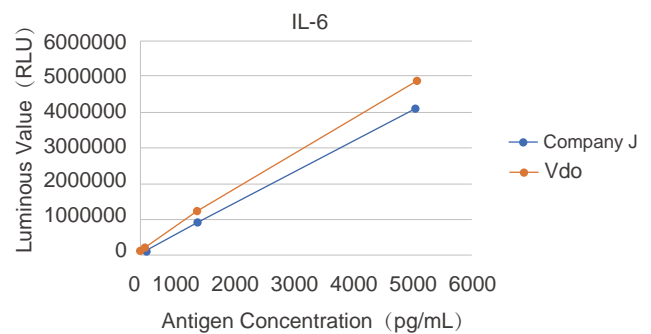
Antigen Concentration	Company J's Magnetic Microspheres	VDO's Magnetic Microspheres
0ng/ml	8787	8061
5ng/ml	99936	95505
25ng/ml	406235	380296
50ng/ml	809104	760986
200ng/ml	2853867	2601184
600ng/ml	6519703	6430896



- ▲ Under the same conditions, when the antigen concentration is 0ng/ml, VDO's magnetic microspheres shows less interference; with other antigen concentrations, the signal strength of VDO's and Company J's magnetic microspheres are comparable.

### Detection of interleukin-6 (IL-6) by magnetic microsphere chemiluminescence method

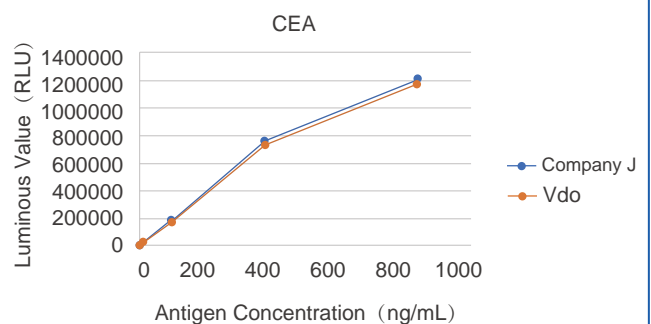
Antigen Concentration	Company J's Magnetic Microspheres	VDO's Magnetic Microspheres
0pg/ml	1393	1487
5pg/ml	8413	11150
10pg/ml	20040	22390
100pg/ml	98271	140919
1000pg/ml	830407	1186483
5000pg/ml	4137743	4873955



- ▲ Under the same conditions, the signal of VDO's magnetic microspheres is stronger than Company J's; moreover, the signal of VDO's magnetic microspheres is 1.4 times that of Company J's when the antigen concentration is 100pg/ml.

### Detection of carcinoembryonic antigen (CEA) by magnetic microsphere chemiluminescence method

Antigen Concentration	Company J's Magnetic Microspheres	VDO's Magnetic Microspheres
0ng/ml	595	557
2.29ng/ml	5129	4884
11.43ng/ml	21118	18987
102.68ng/ml	180875	171731
414.13ng/ml	759088	723924
918.34ng/ml	1216901	1180381



- ▲ Under the same conditions, the signal strength of VDO's and Company J's magnetic microspheres are comparable.

## Ordering Information

Cat. No.	Particle Size	Color	Surface Groups	Solids	Size
CMP0600CA	0.6µm	Brownish yellow	COOH	2.5%	10ml, 100ml, 1L
CMP1001CA	1µm	Brownish yellow	COOH	2.5%	10ml, 100ml, 1L
CMP1003CA	3µm	Brownish yellow	COOH	2.5%	10ml, 100ml, 1L
CMP0600SA	0.6µm	Brownish yellow	SA	1.0%	10ml, 100ml, 1L
CMP1001SA	1µm	Brownish yellow	SA	1.0%	10ml, 100ml, 1L
CMP1003SA	3µm	Brownish yellow	SA	1.0%	10ml, 100ml, 1L



# Magnetic Microspheres for Protein Purification

VDO Biotech has developed a series of protein purification microspheres with uniform particle size, stable and controllable surface functional groups, and high experimental repeatability. It is suitable for high-throughput purification and can directly prepare high-purity target protein from crude samples. Moreover, we can customize microspheres with different particle sizes and surface functional groups to meet customers' specific purification needs for various sample types and applications.



- **Composition:** Iron oxide ( $\text{Fe}_3\text{O}_4$ )
- **Particle Size:** 0.6 $\mu\text{m}$ , 3 $\mu\text{m}$ , 5 $\mu\text{m}$ , 50 $\mu\text{m}$
- **Surface Modification:** Protein A / Protein G
- **Dispersion Medium:** DI water or neutral buffer
- **Storage Condition:** Store at 2-8°C, do not freeze

## Ordering Information

### Protein A-coated Magnetic Microspheres

Cat. No.	Particle Size	Color	Surface Groups	Solids	Size
PMP0600AA	0.6 $\mu\text{m}$	Brownish yellow	Protein A	1.0%	10ml, 100ml, 1L
PMP1003AA	3 $\mu\text{m}$	Brownish yellow	Protein A	1.0%	10ml, 100ml, 1L
PMP1005AA	5 $\mu\text{m}$	Brownish yellow	Protein A	1.0%	10ml, 100ml, 1L
PMP1050AA	50 $\mu\text{m}$	Brownish yellow	Protein A	1.0%	10ml, 100ml, 1L

### Protein G-coated Magnetic Microspheres

Cat. No.	Particle Size	Color	Surface Groups	Solids	Size
PMP0600GA	0.6 $\mu\text{m}$	Brownish yellow	Protein G	1.0%	10ml, 100ml, 1L
PMP1003GA	3 $\mu\text{m}$	Brownish yellow	Protein G	1.0%	10ml, 100ml, 1L
PMP1005GA	5 $\mu\text{m}$	Brownish yellow	Protein G	1.0%	10ml, 100ml, 1L
PMP1050GA	50 $\mu\text{m}$	Brownish yellow	Protein G	1.0%	10ml, 100ml, 1L

Other specifications can be customized upon request.

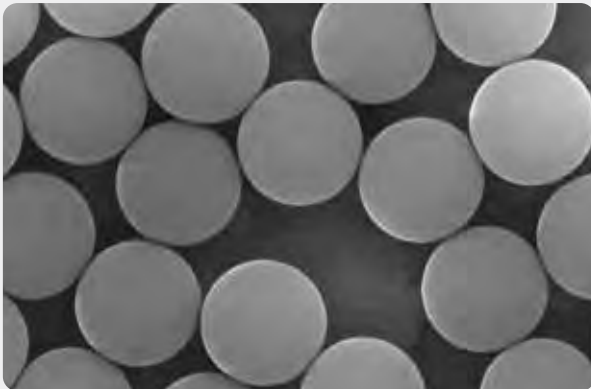


# Polymeric Microspheres

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# Latex Microspheres

VDO Biotech's latex microspheres are made of polystyrene. Through our proprietary surface coating process, different functional groups are added to the microspheres in controlled amounts. We provide microspheres with customized particle sizes to meet customers' specific needs for sensitivity and linear range. This series of latex microspheres are widely used for different applications, such as particle enhanced immunoturbidimetry (PET), latex agglutination test, and microsphere capture enzyme-linked immunosorbent assay, etc.



- Sufficient surface functional groups: efficiently couple with sufficient amount of target protein
- Uniform diameter, stable and controllable surface functional groups: high reproducibility
- Large scale production capacity: up to 100L/batch, batch-to-batch consistency, scalable and stable production
- Customized particle sizes and surface functional groups: satisfy customers' specific product development needs



- **Material:** Polystyrene polymer
- **Density:** 1.05g/cm<sup>3</sup>
- **Additive:** Contains trace amount of surfactant
- **Particle Refractive Index:** 1.59 (589nm wavelength, 25°C)
- **Uniformity:** CV<5%
- **Particle Size:** 80nm ~ 400nm
- **Dispersion Medium:** DI water
- **Storage Condition:** Store at 2-25°C; do not freeze

## Ordering Information

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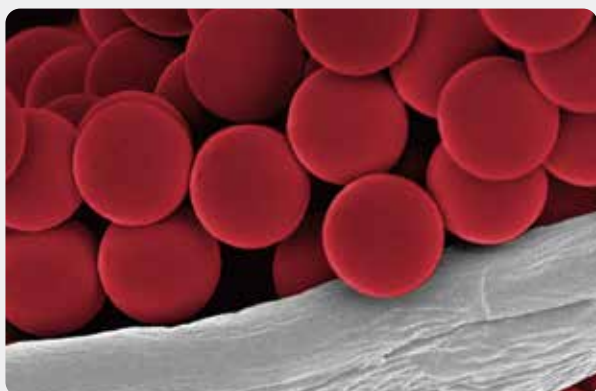
### Carboxyl-coated Latex Microspheres

Cat. No.	Particle Size	Color	Surface Groups	Solids	Size
PS0080CHA	80nm	White	COOH	10.0%	10ml, 100ml, 1L
PS0080CLA	80nm	White	COOH	10.0%	10ml, 100ml, 1L
PS0100CHA	100nm	White	COOH	10.0%	10ml, 100ml, 1L
PS0100CLA	100nm	White	COOH	10.0%	10ml, 100ml, 1L
PS0120CHA	120nm	White	COOH	10.0%	10ml, 100ml, 1L
PS0120CLA	120nm	White	COOH	10.0%	10ml, 100ml, 1L
PS0150CHA	150nm	White	COOH	10.0%	10ml, 100ml, 1L
PS0150CLA	150nm	White	COOH	10.0%	10ml, 100ml, 1L
PS0180CHA	180nm	White	COOH	10.0%	10ml, 100ml, 1L
PS0180CLA	180nm	White	COOH	10.0%	10ml, 100ml, 1L
PS0200CHA	200nm	White	COOH	10.0%	10ml, 100ml, 1L
PS0200CLA	200nm	White	COOH	10.0%	10ml, 100ml, 1L
PS0300CHA	300nm	White	COOH	10.0%	10ml, 100ml, 1L
PS0300CLA	300nm	White	COOH	10.0%	10ml, 100ml, 1L
PS0400CHA	400nm	White	COOH	10.0%	10ml, 100ml, 1L
PS0400CLA	400nm	White	COOH	10.0%	10ml, 100ml, 1L

Microspheres with other functional groups and particle sizes can be customized upon request.

# Color-dyed Microspheres

Utilizing our proprietary internal saturation dyeing process, VDO Biotech has developed a series of color-dyed microspheres. This series of products are bright and diverse in color, suitable for qualitative and semi-quantitative detection. The product covers the colors of the rainbow series, which can help avoid the background interference of sample, and also provide an effective tool for multiple chromatography detection. Color-dyed microspheres are ideal for technology platforms such as agglutination testing and lateral flow.



- Sufficient surface groups: higher protein binding capacity
- Higher sensitivity: ideal alternative to colloidal gold
- Large scale production: production capacity is up to 500 million tests/batch
- Internal dyeing method: rich colors, no dye on the particle surface, easy to couple
- Customized production: various options of particle size, surface group content, and color/fluorescence dyeing



- **Material:** Polystyrene polymer
- **Uniformity:** CV<5%
- **Particle Size:** 100nm - 400nm
- **Surface Functional Groups:** Carboxyl (COOH), Streptavidin (SA)
- **Additive:** Contains trace amount of surfactant
- **Storage Condition:** Carboxyl-coated microspheres: 2-25°C; do not freeze  
Streptavidin-coated microspheres: 2-8°C; do not freeze

## Ordering Information

### Carboxyl Color-dyed Microspheres

Cat. No.	Particle Size	Color	Surface Groups	Solids	Size
DR0200CA	200nm	Red	COOH	4.0%	1ml, 25ml, 100ml, 500ml
DR0300CA	300nm	Red	COOH	4.0%	1ml, 25ml, 100ml, 500ml
DR0400CA	400nm	Red	COOH	4.0%	1ml, 25ml, 100ml, 500ml

Cat. No.	Particle Size	Color	Surface Groups	Solids	Size
DB0200CA	200nm	Blue	COOH	4.0%	1ml, 25ml, 100ml, 500ml
DB0300CA	300nm	Blue	COOH	4.0%	1ml, 25ml, 100ml, 500ml
DB0400CA	400nm	Blue	COOH	4.0%	1ml, 25ml, 100ml, 500ml

Cat. No.	Particle Size	Color	Surface Groups	Solids	Size
DK0200CA	200nm	Black	COOH	4.0%	1ml, 25ml, 100ml, 500ml
DK0300CA	300nm	Black	COOH	4.0%	1ml, 25ml, 100ml, 500ml
DK0400CA	400nm	Black	COOH	4.0%	1ml, 25ml, 100ml, 500ml

### Streptavidin(SA)-coated Color-dyed Microspheres

Cat. No.	Particle Size	Color	Surface Groups	Solids	Size
DR0200SA	200nm	Red	SA	0.1%	1ml, 25ml, 100ml, 500ml
DR0300SA	300nm	Red	SA	0.1%	1ml, 25ml, 100ml, 500ml
DR0400SA	400nm	Red	SA	0.1%	1ml, 25ml, 100ml, 500ml

Other specifications can be customized according to customers' requirements.

### Supporting Raw Materials

Cat. No.	Product Name	Use	Type	Size
MIDM01	SARS-CoV-2 NP Antibody	Labelling	Monoclonal antibody (McAb)	1mg, 10mg, 1000mg
MIDM02	SARS-CoV-2 NP Antibody	Coating	Monoclonal antibody (McAb)	1mg, 10mg, 1000mg
CM20211	Chicken IgY	Labelling (Quality Control)	Polyclonal antibody (PcAb)	1mg, 10mg, 1000mg
RP20212	Rabbit anti chicken IgY	Coating (Quality Control)	Polyclonal antibody (PcAb)	1mg, 10mg, 1000mg
M20211	Mouse IgG	Repressor	Polyclonal antibody (PcAb)	1mg, 10mg, 1000mg

Other specifications can be customized according to customers' requirements.

## Supporting Materials (Microspheres Release Pad)

Cat. No.	Product Name	Use	Dimension (Length×Width)	Weight	Size
VHC06001	Glass fiber membrane filter	Microspheres release pad	200×300mm	70-80g/m <sup>2</sup>	100pcs/bag
VHC06002	Glass fiber membrane filter	Microspheres release pad	200×300mm	50-60g/m <sup>2</sup>	100pcs/bag

Other specifications can be customized according to customers' requirements.

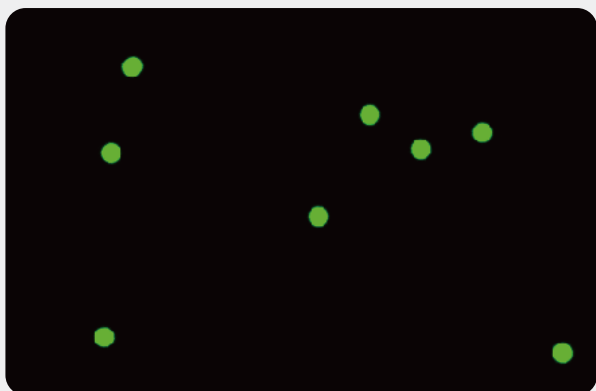
## Supporting Raw Materials

Cat. No.	Product Name	Use	Type	Size
IA0108A	SARS-CoV-2 NP conjugate pad (300nm microspheres)	SARS-CoV-2 NP test	Semi-finished Products	7mm×300mm
IA0109A	SARS-CoV-2 NP conjugate pad (400nm microspheres)	SARS-CoV-2 NP test	Semi-finished Products	7mm×300mm
IA0102A	SARS-CoV-2 NP Test Strips (300nm microspheres)	SARS-CoV-2 NP test	Semi-finished Products	1 test /5 tests/25 tests
IA0103A	SARS-CoV-2 NP Test Strips (400nm microspheres)	SARS-CoV-2 NP test	Semi-finished Products	1 test /5 tests/25 tests
IA0111A	Sample cracking fluid	SARS-CoV-2 NP test	Matching products	/

Other specifications can be customized according to customers' requirements.

# Fluorescent Microspheres

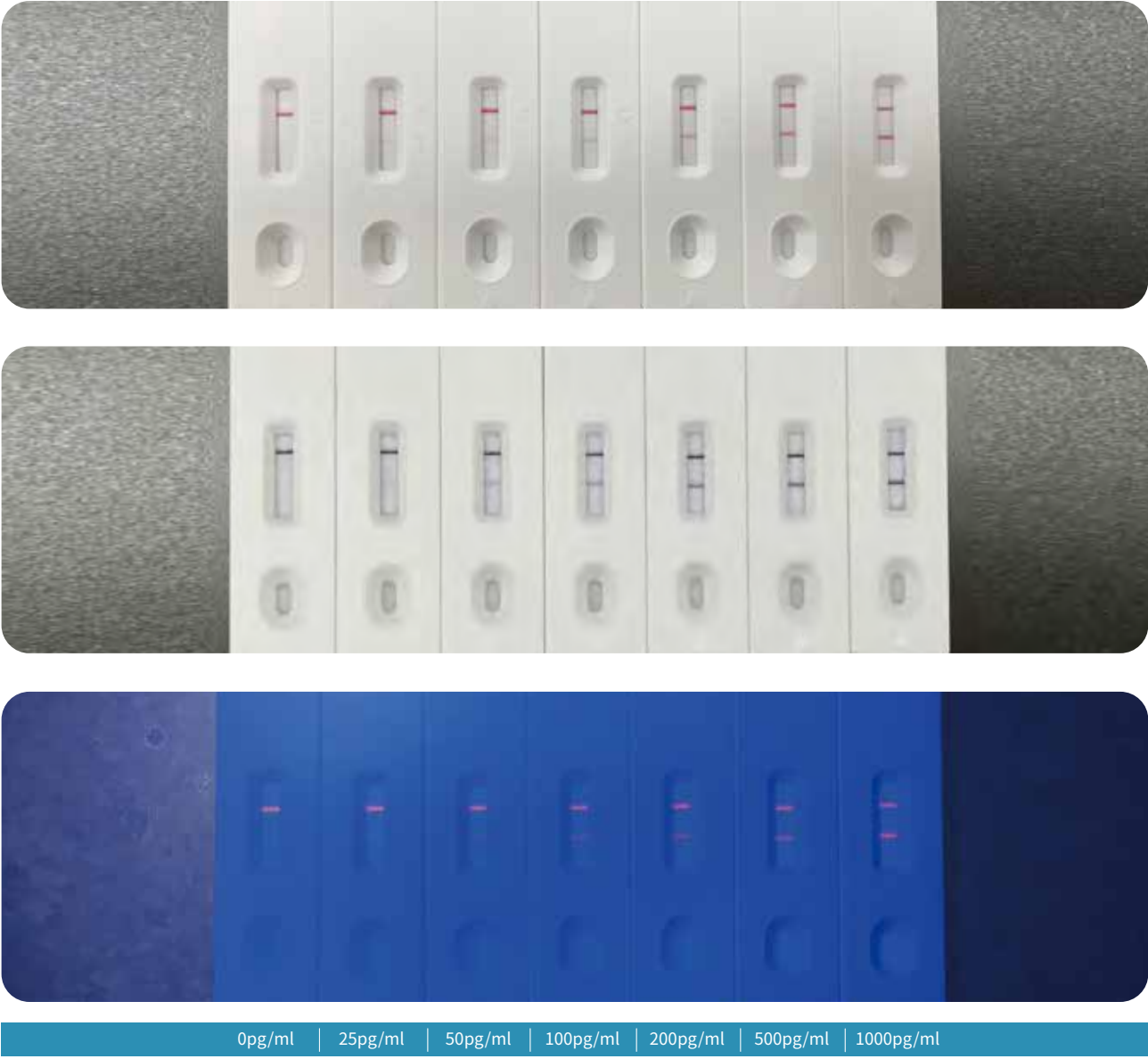
VDO Biotech's fluorescent microspheres are designed for ultra-sensitive lateral flow detection. The data can be read by fluorescence detector to achieve a more sensitive quantitative detection, and it is the preferred material for ultra-sensitive lateral flow detection. The dyes of this product series are embedded in the microspheres and filled firmly. With strong and long-lasting fluorescence intensity, our fluorescent microspheres are ideal for the quantitative detection reagents development.



- **Material:** Polystyrene polymers containing encapsulated dyes
- **Surface Functional Groups:** Carboxyl (COOH) / Streptavidin (SA)
- **Dispersion medium:** DI water
- **Uniformity:** C.V% < 5%
- **Size range:** 100nm - 400nm
- **Additives:** Contains trace amount of surfactant
- **Storage conditions:** Carboxyl-coated microspheres: 2 - 25°C in dark condition, do not freeze; Streptavidin-coated microspheres: 2 - 25°C in dark condition, do not freeze



Case Studies:  
Application of color-dyed and fluorescent microspheres in lateral flow



▲ SARS-CoV-2 N protein was detected by VDO Biotech's color-dyed microspheres and fluorescent microspheres respectively, and the protein can still be detected when the concentration is as low as 25pg/ml.

## Ordering Information

### Green Fluorescent Microspheres

Cat. No.	Particle Size	Fluorescence	Excitation	Emission	Surface Groups	Solids	Size
FG0100CA	100nm	Green fluorescence	488nm	520nm	COOH	1.0%	1ml, 10ml, 100ml
FG0200CA	200nm	Green fluorescence	488nm	520nm	COOH	1.0%	1ml, 10ml, 100ml
FG0300CA	300nm	Green fluorescence	488nm	520nm	COOH	1.0%	1ml, 10ml, 100ml
FG0400CA	400nm	Green fluorescence	488nm	520nm	COOH	1.0%	1ml, 10ml, 100ml

Other specifications can be customized according to customers' requirements.

### SA-coated Fluorescent Microspheres

Cat. No.	Particle Size	Fluorescence	Excitation	Emission	Surface Groups	Solids	Size
FG0100SA	100nm	Green fluorescence	488nm	520nm	SA	0.1%	1ml, 10ml, 100ml
FG0200SA	200nm	Green fluorescence	488nm	520nm	SA	0.1%	1ml, 10ml, 100ml
FG0300SA	300nm	Green fluorescence	488nm	520nm	SA	0.1%	1ml, 10ml, 100ml
FG0400SA	400nm	Green fluorescence	488nm	520nm	SA	0.1%	1ml, 10ml, 100ml

Other specifications can be customized according to customers' requirements.

### Red Fluorescent Microspheres

Cat. No.	Particle Size	Fluorescence	Excitation	Emission	Surface Groups	Solids	Size
FR0100CA	100nm	Red fluorescence	535nm	610nm	COOH	1.0%	1ml, 10ml, 100ml
FR0200CA	200nm	Red fluorescence	535nm	610nm	COOH	1.0%	1ml, 10ml, 100ml
FR0300CA	300nm	Red fluorescence	535nm	610nm	COOH	1.0%	1ml, 10ml, 100ml
FR0400CA	400nm	Red fluorescence	535nm	610nm	COOH	1.0%	1ml, 10ml, 100ml

Other specifications can be customized according to customers' requirements.

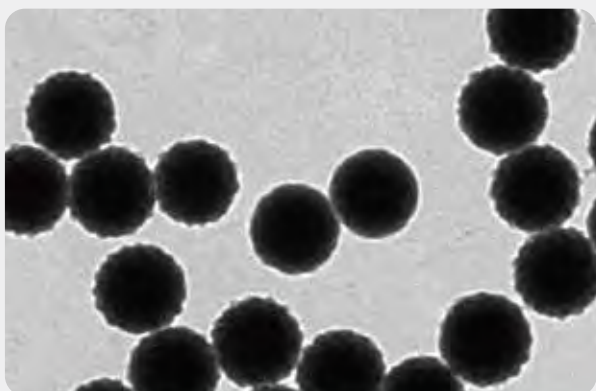
### SA-coated Fluorescent Microspheres

Cat. No.	Particle Size	Fluorescence	Excitation	Emission	Surface Groups	Solids	Size
FR0100SA	100nm	Red fluorescence	535nm	610nm	SA	0.1%	1ml, 10ml, 100ml
FR0200SA	200nm	Red fluorescence	535nm	610nm	SA	0.1%	1ml, 10ml, 100ml
FR0300SA	300nm	Red fluorescence	535nm	610nm	SA	0.1%	1ml, 10ml, 100ml
FR0400SA	400nm	Red fluorescence	535nm	610nm	SA	0.1%	1ml, 10ml, 100ml

Other specifications can be customized according to customers' requirements.

# Time-resolved Fluorescent Microspheres

VDO Biotech's fluorescent microspheres are designed for ultra-sensitive lateral flow detection. The data can be read by fluorescence detector to achieve a more sensitive quantitative detection, and it is the preferred material for ultra-sensitive lateral flow detection. The dyes of this product series are embedded in the microspheres and filled firmly. With strong and long-lasting fluorescence intensity, our fluorescent microspheres are ideal for the quantitative detection reagents development.



## Features

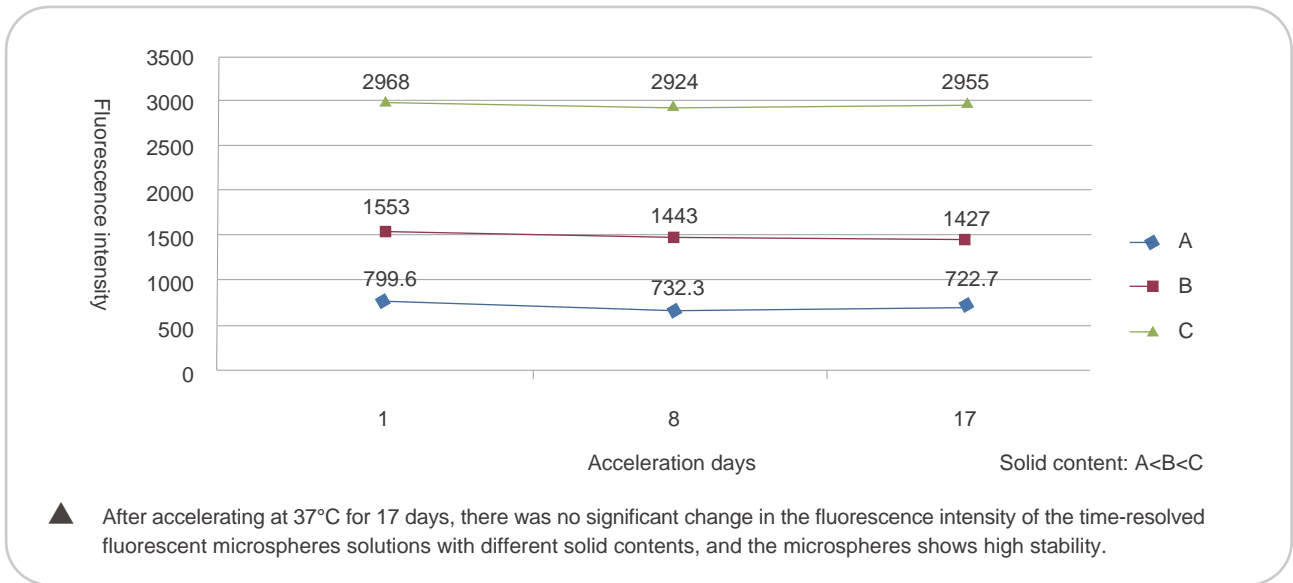
- High Sensitivity: 100-1,000 times higher than colloidal gold
- Easy Operation: fast detection, ideal for POCT (point of care testing)
- Anti-interference: rare earth ion markers, long half-life, and large Stokes Shift value
- Quantitative Detection: the sample concentration can be detected according to the built-in standard curve



## Technical Parameters

- **Material:** Polystyrene polymers containing Rare earth element dyes
- **Uniformity:** CV<5%
- **Particle Size:** 100nm - 400nm
- **Surface Functional Groups:** Carboxyl (COOH), Streptavidin (SA)
- **Additive:** Contains trace amount of surfactant
- **Storage Condition:** Carboxyl-coated microspheres: 2-25°C; do not freeze  
Streptavidin-coated microspheres: 2-8°C; do not freeze

## Stability verification of Time-resolved Fluorescent Microspheres (particle size: 200nm, temperature: 37°C, acceleration time: 17 days)



## Ordering Information

### Time-resolved Fluorescent Microspheres Carboxyl-modified

Cat. No.	Particle Size	Excitation	Emission	Surface Groups	Solids	Size
FT0100CA	100nm	360nm	615nm	COOH	1.0%	1ml, 10ml, 100ml
FT0200CA	200nm	360nm	615nm	COOH	1.0%	1ml, 10ml, 100ml
FT0300CA	300nm	360nm	615nm	COOH	1.0%	1ml, 10ml, 100ml
FT0400CA	400nm	360nm	615nm	COOH	1.0%	1ml, 10ml, 100ml

### Time-resolved Fluorescent Microspheres SA-modified

Cat. No.	Particle Size	Excitation	Emission	Surface Groups	Solids	Size
FT0100SA	100nm	360nm	615nm	SA	0.1%	1ml, 10ml, 100ml
FT0200SA	200nm	360nm	615nm	SA	0.1%	1ml, 10ml, 100ml
FT0300SA	300nm	360nm	615nm	SA	0.1%	1ml, 10ml, 100ml
FT0400SA	400nm	360nm	615nm	SA	0.1%	1ml, 10ml, 100ml

# Flow Cytometry Microspheres

Flow cytometry (FCM) is a multi-parameter and rapid quantitative analysis method at the cellular molecular level. Through the use of flow cytometry, flow cytometry microspheres and monoclonal antibodies, single cells or other biological particles can be quantitatively analyzed. FCM can analyze tens of thousands of cells at high speed, and can measure multiple parameters from one cell at the same time. With the advantages of fast, high precision and accuracy, FCM is recognized as one of the most advanced cell quantitative analysis techniques.

## Flow Cytometry Cell Counting Microspheres

Flow cytometry microspheres apply to the quality control of cell-counting, which makes detection results of flow cytometry more reliable.

## Multicolor Flow Fluorescent Microspheres

Multicolor Flow Fluorescent Microspheres (internal dyed) is used for the development of multi-index joint inspection reagent. Multi-index joint inspection reagent combined with multi-laser multi-color flow cytometer can maximize detection throughput.



### Technical Parameters

- **Composition:** Multiple fluorescent dyed polystyrene microparticles
- **Concentration:**  $2.0 \times 10^7$  beads/ml
- **Density:**  $1.05 \text{g/cm}^3$
- **Color:** Green fluorescence (488/520nm), red fluorescence (535/610nm), near infrared fluorescence (635/700nm)
- **Uniformity:** CV<5%
- **Additive:** 0.05% tween-20 dispersant/surfactant
- **Storage Condition:** Store at 2-25°C, do not freeze



### Applications

- Absolute counting
- Quality control of instruments
- Multiple detection

## Ordering Information

### Flow Cytometry Multiple Fluorescent Microspheres

Cat. No.	Particle Size	Size	Description
FM1004CTA	4µm	1ml, 25ml	Tri-color fluorescent
FM1005CTA	5µm	1ml, 25ml	Tri-color fluorescent
FM1004CDA	4µm	1ml, 25ml	Bi-color fluorescent
FM1005CDA	5µm	1ml, 25ml	Bi-color fluorescent

Other specifications can be customized according to customers' requirements.

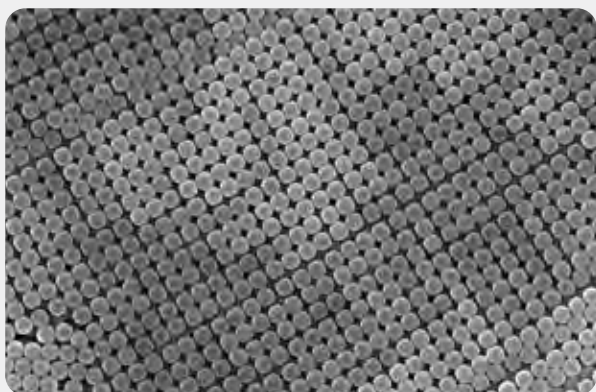
### Flow Cytometry Cell Counting Microspheres

Cat. No.	Particle Size	Size	Concentration
FC1004CA	4µm	1ml, 25ml	2.0×10 <sup>7</sup> beads/ml
FC1005CA	5µm	1ml, 25ml	2.0×10 <sup>7</sup> beads/ml

Other specifications can be customized according to customers' requirements.

# Size Standard Microspheres

Size standard microspheres are a series of solutions containing polymer microspheres. The calibrated average particle size is traceable to the standard ruler and standard microspheres through the US National Institute of Standards and Technology (NIST). The size standard microspheres are verified by a series of particle size analyzers, including photon correlation spectrometer (PCS), disc centrifugal photometer (DCP), tunable resistance pulse sensing (TRPS), nanoparticle tracking analysis (NTA), or laser diffraction (LD), etc. The particle size of our standard microspheres ranges from 10nm to 100µm, which can be used to calibrate and monitor the instrument in a wide range.



- **Composition:** Polystyrene polymer
- **Particle Size:** 10nm-100µm
- **Density:** 1.05g/cm<sup>3</sup>
- **Dispersion Medium:** DI water
- **Particle Refractive Index:** 1.59 (589nm wavelength, 25°C)
- **Uniformity:** CV<3%
- **Additive:** Trace amount of surfactant
- **Storage Condition:** Store at 2-25°C, do not freeze



- Particle size analyzer calibration/quality control
- Light scattering research
- Glial system research
- Self-assembled monolayer
- Photonic crystal research

## Ordering Information

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### Size Standard Microspheres

Cat. No.	Particle Size	Particle Size Level	Solids	Size
30010	10nm	Nanoscale	1.0%	15ml, 50ml
30020	20nm	Nanoscale	1.0%	15ml, 50ml
30030	30nm	Nanoscale	1.0%	15ml, 50ml
30040	40nm	Nanoscale	1.0%	15ml, 50ml
30050	50nm	Nanoscale	1.0%	15ml, 50ml
30060	60nm	Nanoscale	1.0%	15ml, 50ml
30070	70nm	Nanoscale	1.0%	15ml, 50ml
30080	80nm	Nanoscale	1.0%	15ml, 50ml
30090	90nm	Nanoscale	1.0%	15ml, 50ml
30100	100nm	Nanoscale	1.0%	15ml, 50ml
30120	120nm	Nanoscale	1.0%	15ml, 50ml
30150	150nm	Nanoscale	1.0%	15ml, 50ml
30200	200nm	Nanoscale	1.0%	15ml, 50ml
30250	250nm	Nanoscale	1.0%	15ml, 50ml
30300	300nm	Nanoscale	1.0%	15ml, 50ml
30350	350nm	Nanoscale	1.0%	15ml, 50ml
30400	400nm	Nanoscale	1.0%	15ml, 50ml
30450	450nm	Nanoscale	1.0%	15ml, 50ml
30500	500nm	Nanoscale	1.0%	15ml, 50ml
30600	600nm	Nanoscale	1.0%	15ml, 50ml
30700	700nm	Nanoscale	1.0%	15ml, 50ml
30800	800nm	Nanoscale	1.0%	15ml, 50ml
30900	900nm	Nanoscale	1.0%	15ml, 50ml
31001	1 $\mu$ m	Micron	1.0%	15ml, 50ml
31002	2 $\mu$ m	Micron	1.0%	15ml, 50ml
31003	3 $\mu$ m	Micron	1.0%	15ml, 50ml
31004	4 $\mu$ m	Micron	1.0%	15ml, 50ml
31005	5 $\mu$ m	Micron	1.0%	15ml, 50ml
31006	6 $\mu$ m	Micron	1.0%	15ml, 50ml
31007	7 $\mu$ m	Micron	1.0%	15ml, 50ml
31008	8 $\mu$ m	Micron	1.0%	15ml, 50ml
31009	9 $\mu$ m	Micron	1.0%	15ml, 50ml
31010	10 $\mu$ m	Micron	1.0%	15ml, 50ml



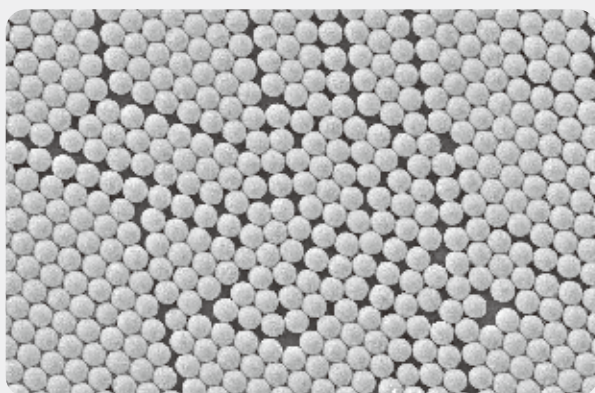
## Size Standard Microspheres

Cat. No.	Particle Size	Particle Size Level	Solids	Size
31012	12µm	Micron	1.0%	15ml, 50ml
31015	15µm	Micron	1.0%	15ml, 50ml
31020	20µm	Micron	1.0%	15ml, 50ml
31030	30µm	Micron	1.0%	15ml, 50ml
31040	40µm	Micron	1.0%	15ml, 50ml
31050	50µm	Micron	1.0%	15ml, 50ml
31060	60µm	Micron	1.0%	15ml, 50ml
31070	70µm	Micron	1.0%	15ml, 50ml
31080	80µm	Micron	1.0%	15ml, 50ml
31090	90µm	Micron	1.0%	15ml, 50ml
31100	100µm	Micron	1.0%	15ml, 50ml

Other specifications can be customized according to customers' requirements.

# Counting Standard Microspheres

The counting standard microspheres are designed for the development, calibration and verification of particle counting equipment. When there are problems with the instruments or during routine maintenance, this series of microspheres can be used to verify and calibrate the instruments to ensure normal operation and correct data output. This series of products strictly abide by the measurement procedures provided by the US National Bureau of Standards Technology (NIST), and are highly NIST traceable. It can meet traceable compliance requirements such as ISO 900, ISO10012, ANSI/NCSL-Z540 and GMP/GLP. Through strict resuspension procedures and particle counting detection, the microsphere suspension with accurate particle number can be obtained, which is an indispensable tool for calibrating particle counting instruments.



## Technical Parameters

- **Composition:** Polystyrene polymer
- **Particle Size:** 10nm-100 $\mu$ m
- **Density:** 1.05g/cm<sup>3</sup>
- **Dispersion Medium:** DI water
- **Particle Refractive Index:** 1.59 (589nm wavelength, 25°C)
- **Uniformity:** CV<3%
- **Additive:** Trace amount of surfactant
- **Storage Condition:** Store at 2-25°C, do not freeze



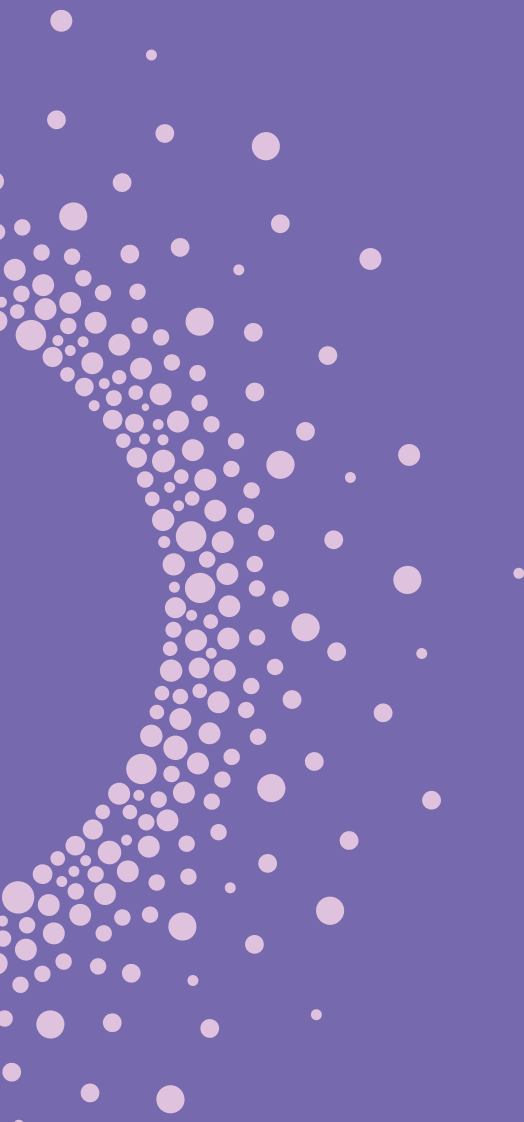
## Applications

- Calibration of microsphere counting instrument
- Drug counting
- Water quality monitoring
- Low concentration liquid counting

## Ordering Information

Cat. No.	Nominal Diameter	Approximate	Size
40100	100nm	10 <sup>7</sup> beads/ml	15ml
40120	120nm	10 <sup>7</sup> beads/ml	15ml
40150	150nm	10 <sup>7</sup> beads/ml	15ml
40200	200nm	10 <sup>7</sup> beads/ml	15ml
40250	250nm	10 <sup>7</sup> beads/ml	15ml
40300	300nm	10 <sup>7</sup> beads/ml	15ml
40350	350nm	10 <sup>7</sup> beads/ml	15ml
40400	400nm	10 <sup>7</sup> beads/ml	15ml
40450	450nm	10 <sup>7</sup> beads/ml	15ml
40500	500nm	10 <sup>7</sup> beads/ml	15ml
40600	600nm	10 <sup>7</sup> beads/ml	15ml
40700	700nm	10 <sup>7</sup> beads/ml	15ml
40800	800nm	10 <sup>7</sup> beads/ml	15ml
40900	900nm	10 <sup>7</sup> beads/ml	15ml
41001	1µm	10 <sup>7</sup> beads/ml	15ml
41002	2µm	10 <sup>7</sup> beads/ml	15ml
41003	3µm	10 <sup>7</sup> beads/ml	15ml
41004	4µm	10 <sup>7</sup> beads/ml	15ml
41005	5µm	10 <sup>7</sup> beads/ml	15ml
41006	6µm	10 <sup>7</sup> beads/ml	15ml
41007	7µm	10 <sup>7</sup> beads/ml	15ml
41008	8µm	10 <sup>7</sup> beads/ml	15ml
41009	9µm	10 <sup>7</sup> beads/ml	15ml
41010	10µm	10 <sup>7</sup> beads/ml	15ml
41012	12µm	10 <sup>7</sup> beads/ml	15ml
41015	15µm	10 <sup>7</sup> beads/ml	15ml
41020	20µm	10 <sup>7</sup> beads/ml	15ml
41030	30µm	10 <sup>7</sup> beads/ml	15ml
41040	40µm	10 <sup>7</sup> beads/ml	15ml
41050	50µm	10 <sup>7</sup> beads/ml	15ml
41060	60µm	10 <sup>7</sup> beads/ml	15ml
41070	70µm	10 <sup>7</sup> beads/ml	15ml

We provide customized drug counting microspheres, water quality monitoring microspheres, low concentration counting microspheres according to customers' requirements.



# Chromatography Media

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## Biomacromolecule Purification Media

# 01

### Coarse purification



Quickly remove large amount of impurities and substances that affect the stability of the target protein, capture the concentrated target protein, and reduce the sample volume. Choose a purification method with high throughput and large capacity, such as salt precipitation and various high-flow-rate and high-capacity chromatography media.

# 02

### Medium purification



Remove most impurities, further concentrate and purify the sample. Choose high-capacity and high-resolution purification methods, such as various high-flow-rate and high-resolution chromatography media.

# 03

### Fine purification



Remove the small amount of remaining impurities to achieve the desired purification purpose. As the value of samples increases, purification methods with high recovery and high resolution are recommended at this stage, such as various high-recovery, high-resolution chromatography media.

### Selection Guide for Biomacromolecule Purification Media

Tagged recombinant protein

Ni Focurose 6FF IDA/IMAC/TED | GST Focurose 4FF  
Protein A/G Focurose 4FF

Inclusion body protein on-column refolding

Ni Focurose 6FF IMAC | Phenyl/Butyl-S/Butyl/Octyl Focurose 6FF/4FF  
Focudex G-75 | DEAE/Q/SP/CM/ANX Focurose 6FF/6XL/HF

Natural protein

Benzamidine Focurose 4FF/6B | Phenyl/Butyl-S/Butyl/Octyl Focurose 6FF  
DEAE/Q/SP/CM/ANX Focurose 6FF/6XL/6HF  
Focudex G-75, MMC/MMA Focurose 6FF/HPR

Vaccine, virus

Phenyl/Butyl-S/Butyl/Octyl Focurose 6FF/4FF  
DEAE/Q/SP/CM/ANX Focurose 6XL/6HF/HPR  
Focudex 6FF/4FF, MMC/MMA Focurose 6FF/HPR  
Focore 700, Plasmid Focurose HPR

Ammonium sulfate desalting sample

Phenyl/Butyl-S/Butyl/Octyl Focurose 6FF/4FF

Desalination of biological macromolecules

Focudex G-25

Antibody purification

Protein A/G Focurose 4FF | IgM/IgY Focurose 6HP  
MMC/MMA Focurose 6HF/HPR

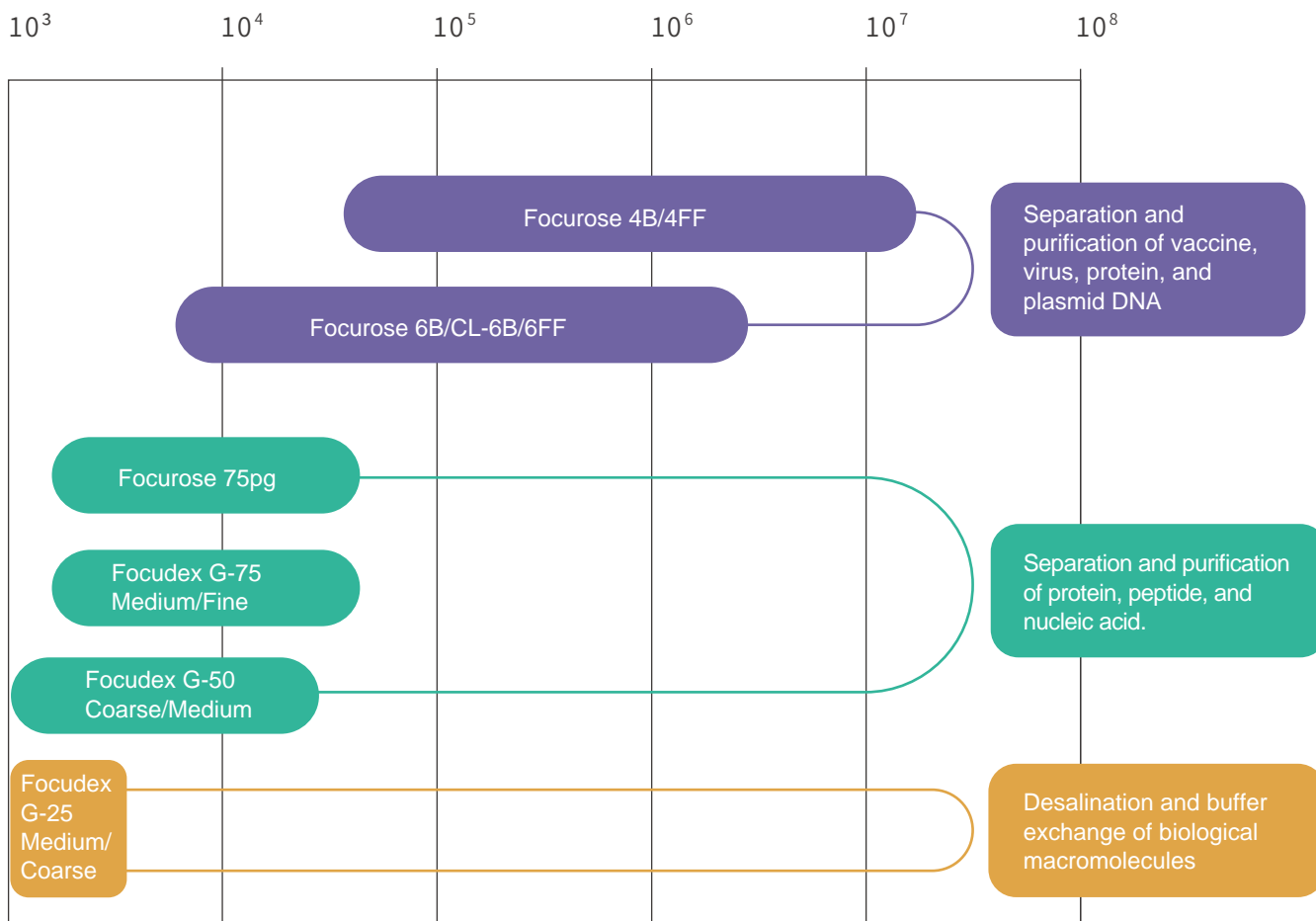
Antibody/compound coupling

CNBr/NHS/Epoxy/ECH/EAH Focurose 4FF  
Focurose 6B/4B/CL-6B/4FF/6FF

★ ★ ★ Linear flow rate (cm/h)=flow rate (ml/min) × 60/square of column radius (cm) × π

# Gel filtration chromatography media

## Selection Guide for Gel Filtration Chromatography Media



Gel filtration media fractionation range (Globulin Da)

### Application Strategy of Gel Filtration Chromatography Media

- Gel filtration chromatography is often used in the fine purification stage with less impurities;
- Gel filtration chromatography is used for the purification of less sample volume;
- During group separation (such as desalination), it can also be used in the crude purification stage;
- Only one buffer is needed for gel filtration chromatography.
- The type of buffer hardly affects the separation effect. The addition of 150 mM sodium chloride to the buffer can effectively reduce non-specific adsorption.

### Product List of Gel Filtration Chromatography Media

Agarose gel filter media

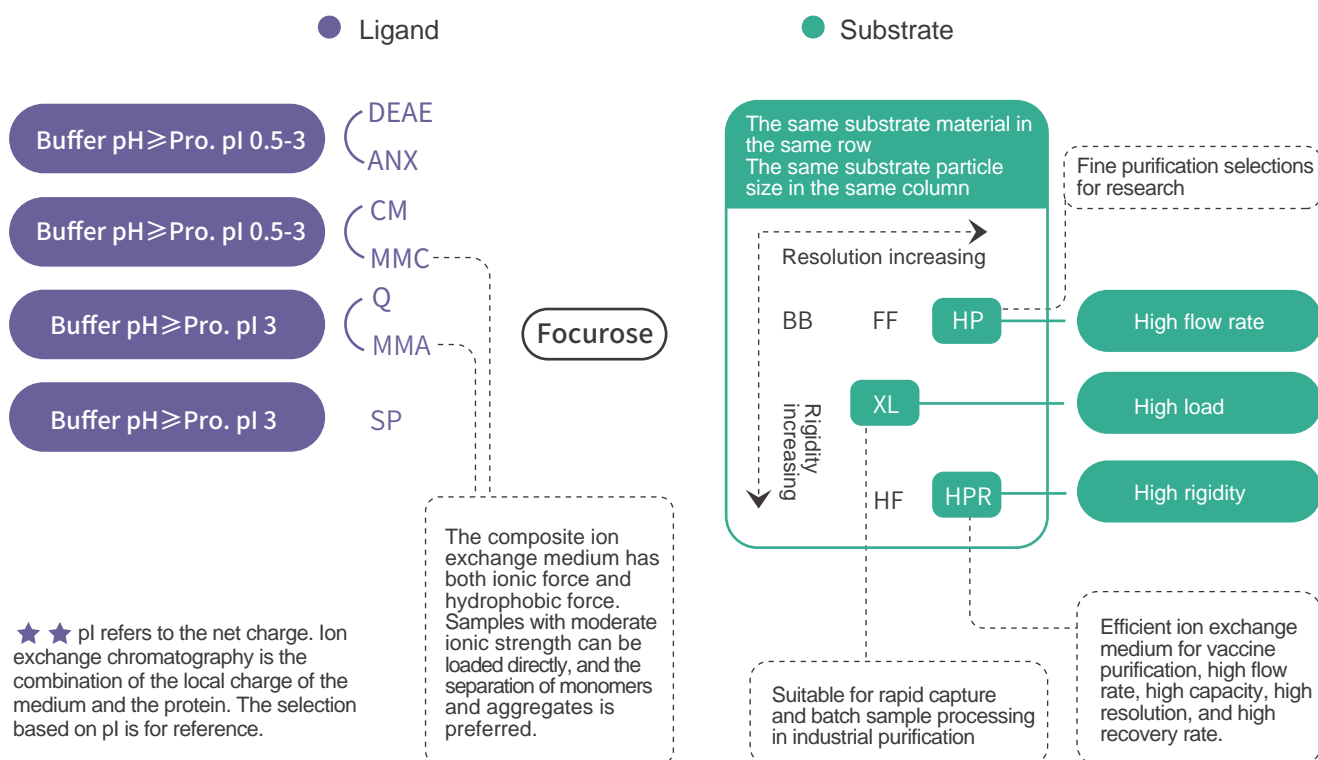
Product Name	Separation range (Globulin)	Particle size range	Average particle size	Withstand stress	Maximum flow rate	PH stability	Application
Focurose 4FF	$7 \times 10^4 - 2 \times 10^7$	45-165 $\mu$ m	90 $\mu$ m	$\leq 0.3$ Mpa	250cm/h	2-12(Long term) 2-14(Short term)	Separation of vaccines, viruses, etc.
Focurose CL-6B	$1 \times 10^4 - 4 \times 10^4$			$\leq 0.05$ Mpa	30cm/h	3-12(Long term) 2-14(Short term)	Determination of biological macromolecular weight such as protein and polysaccharide
Focurose 6FF	$1 \times 10^4 - 4 \times 10^4$			$\leq 0.3$ Mpa	300cm/h	3-12(Long term) 2-14(Short term)	Plasmid DNA, virus, vaccine purification

## Sephadex Gel Filtration Media

Product Name	Separation range (Globulin)	Particle size of dry powder	Swelling degree	Maximum flow rate	PH stability	Application
Focudex G-25 Medium	1x10 <sup>3</sup> -5x10 <sup>3</sup>	45-165μm	4-6g/ml	150cm/h	2-13	Mainly used for desalting and buffer exchange of biological macromolecules
Focudex G-50 Medium	1x10 <sup>3</sup> -3x10 <sup>4</sup>		9-11g/ml	80cm/h	2-13	Gel filtration chromatography separation and purification of peptides and proteins
Focudex G-75 Medium	3x10 <sup>3</sup> -8x10 <sup>4</sup>		12-15g/ml	80cm/h	2-13	

## Ion Exchange Chromatography Media

### Ion Exchange Media Selection Guide



### Ion Exchange Chromatography Media Product List

#### High flow rate agarose ion exchange chromatography medium

Product Name	Ion Load	Particle size range	Maximum flow rate	Withstand stress	PH stability	Application
SP Focurose 6FF	180-250 H <sup>+</sup> μmol/L	45-165μm	700cm/h	≤0.3Mpa	4-14 (Short term) 4-13 (Long term)	Rapid capture and purification of positively charged biological macromolecules
CM Focurose 6FF	90-130 H <sup>+</sup> μmol/L		700cm/h		2-14 (Short term) 4-13 (Long term)	
Q Focurose 6FF	180-250 Cl <sup>-</sup> μmol/L		700cm/h		2-14 (Short term) 2-12 (Long term)	Rapid capture and purification of negatively charged biological macromolecules
DEAE Focurose 6FF	110-160 Cl <sup>-</sup> μmol/L		700cm/h		1-14 (Short term) 2-13 (Long term)	

In addition to the particle size of 45-165μm in the above table, high-flow ion exchange chromatography media with particle size of 25-45μm (fine purification) and 100-300μm (rapid capture) are also available.

## Super high-capacity agarose substrate ion exchange medium

Product Name	Ion Load	Particle size range	Maximum flow rate	Withstand stress	PH stability	Application
SP Focurose 6XL	180-250 H <sup>+</sup> μmol/L	45-165μm	700cm/h	≤0.3Mpa	3-14(Short term) 4-13(Long term)	Rapid capture and purification of proteins, nucleic acids, polysaccharides, vaccines, and viruses.
CM Focurose 6XL	90-130 H <sup>+</sup> μmol/L				2-14(Short term) 4-13(Long term)	
Q Focurose 6XL	180-250 Cl <sup>-</sup> μmol/L				2-14(Short term) 2-12(Long term)	
DEAE Focurose 6XL	210-310 Cl <sup>-</sup> μmol/L				1-14(Short term) 2-13(Long term)	

In addition to the particle size of 45-165μm in the above table, ultra-high-capacity ion exchange chromatography media with particle size of 25-45μm (fine purification) and 100-300μm (rapid capture) are also available.

## High rigidity agarose substrate ion exchange medium

Product Name	Ion Load	Particle size range	Maximum flow rate	Withstand stress	PH stability	Application
SP Focurose 6HF	140-200 H <sup>+</sup> μmol/L	45-165μm	1000cm/h	≤0.5Mpa	3-14(Short term) 4-12(Long term)	High flow rate and high capacity; suitable for large scale production
CM Focurose 6HF	90-120 H <sup>+</sup> μmol/L				3-14(Short term) 4-12(Long term)	
Q Focurose 6HF	160-220 Cl <sup>-</sup> μmol/L				2-14(Short term) 2-12(Long term)	High flow rate and high capacity; suitable for large scale production
DEAE Focurose 6HF	290-350 Cl <sup>-</sup> μmol/L				2-14(Short term) 2-12(Long term)	

In addition to the 45-165μm particle size in the above table, we also provide 25-45μm high rigidity agarose ion exchange media, and complex ion exchange media with MMA/MMC ligands that have both hydrophobic and ion exchange functions.

## Macroporous high rigidity agarose substrate ion exchange medium

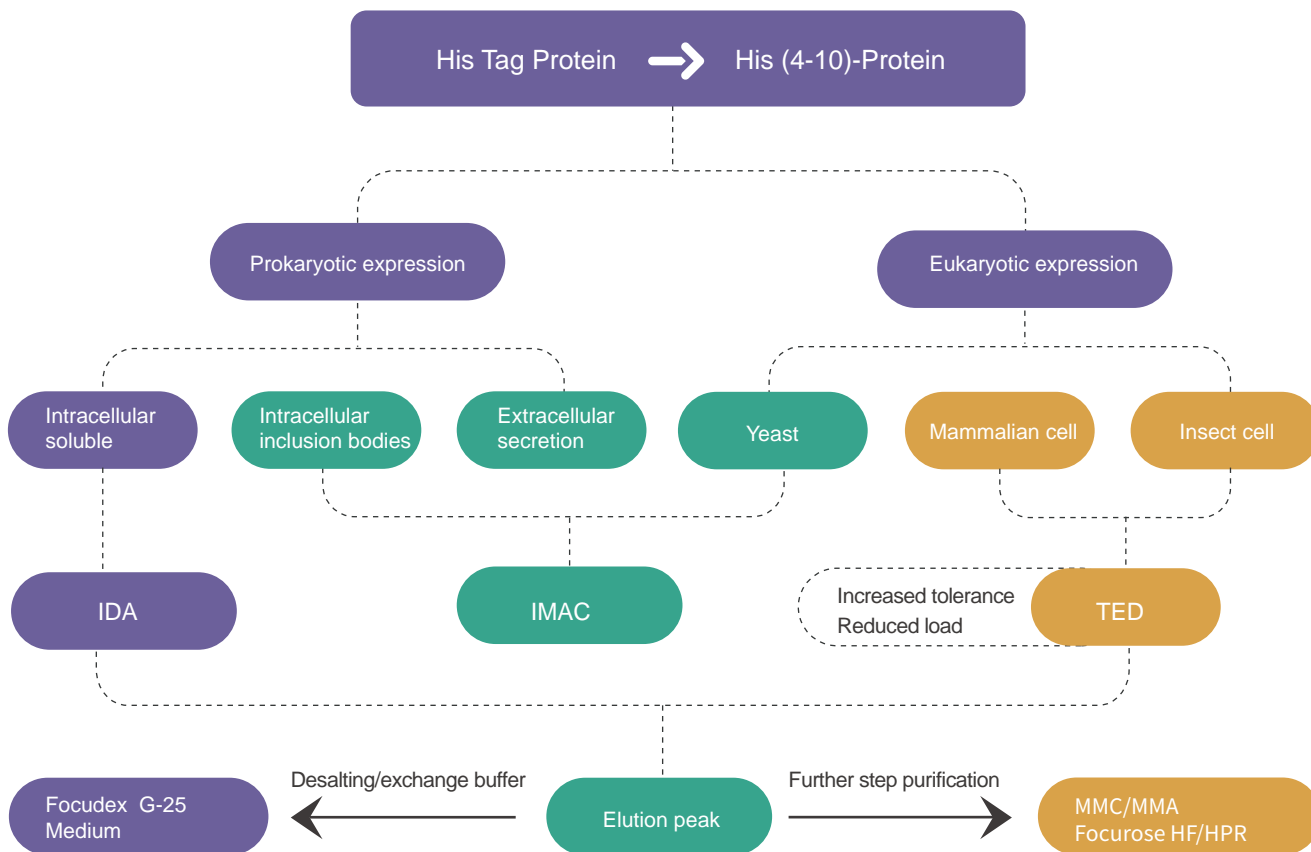
Product Name	Ion Load	Particle size range	Maximum flow rate	Withstand stress	PH stability	Application
SP Focurose HPL	100-130 H <sup>+</sup> μmol/L	45-165μm	300cm/h	≤0.3Mpa	4-13(Short term) 2-13(Long term)	Suitable for separation and purification of biological macromolecules, such as PEG-proteins, VLPs and viruses, etc.
CM Focurose HPL	60-100 H <sup>+</sup> μmol/L				2-14(Short term) 4-10(Long term)	
Q Focurose HPL	60-120 Cl <sup>-</sup> μmol/L				1-12(Short term) 2-13(Long term)	
DEAE Focurose HPL	70-110 Cl <sup>-</sup> μmol/L				1-14(Short term) 3-10(Long term)	

In addition to the 45-165μm particle size in the above table, we also provide 25-45μm high rigidity agarose ion exchange media, and complex ion exchange media with MMA/MMC ligands that have both hydrophobic and ion exchange functions.



# Affinity Chromatography Media

## Selection Guide for His Tag Protein Purification Affinity Media



Chelating ion (binding capacity to His Tag)  $\text{Cu}^{2+} > \text{Ni}^{2+} > \text{Zn}^{2+} > \text{Co}^{2+}$

Strongest binding force

Most used

Weak binding force, high resolution

## Affinity chromatography media product list

His tag protein purification affinity chromatography media (divided into IDA, IMAC, and TED according to different chelating methods)

Product Name	Protein/Chelating Amount 1ml Medium	Particle size range	Maximum flow rate	Withstand stress	PH stability	Application
Ni Focurose 6FF(IDA)	45mg His tag protein	45-165µm	600cm/h	≤0.3Mpa	2-14(Short term) 3-12(Long term)	His tag protein purification
Ni Focurose 6FF(IMAC)	40mg His tag protein		600cm/h		2-14(Short term) 3-12(Long term)	Large-scale His tag protein purification
Ni Focurose 6FF(TED)	20mg His tag protein		600cm/h		2-14(Short term) 3-12(Long term)	Tolerance to 100mM EDTA and 10mM DTT, without nickel removal, directly wash thoroughly with 1M NaOH.

In addition to the above products, His tag protein purification media for other substrates such as 4FF can be customized.

## GST tag protein purification affinity medium

Product Name	Protein/Chelating Amount 1ml Medium	Particle size range	Maximum flow rate	Withstand stress	PH stability	Application
GST Focurose 4FF	15mg GST tag protein	45-165µm	450cm/h	≤0.3Mpa	3-12(Long term)	GST tag protein purification

In addition to the above products, GST tag protein purification media for other substrates other than 4FF can be customized.

## Affinity chromatography media for antibody purification

Product Name	Functional capacity(mg/ml)	Particle size range	Maximum flow rate	Withstand stress	PH stability	Application
Protein A Focurose 4FF	20lgG	45-165µm	300cm/h	≤0.3Mpa	2-10(Short term) 3-9(Long term)	Purification of antibodies, immunoglobulins and FC fusion proteins
Protein G Focurose 4FF	25lgG		300cm/h		2-10(Short term) 3-9(Long term)	

## Affinity media for serine protease purification

Product Name	Functional capacity(mg/ml)	Particle size range	Maximum flow rate	Withstand stress	PH stability	Application
Benzamidine Focurose 6B	13 mg Trypsinogen	45-165µm	75cm/h	≤0.02Mpa	1-9(Short term) 2-8(Long term)	Separation and purification of trypsin, chymotrypsin, elastase, etc.
Benzamidine Focurose 4FF(HS)	35 mg Trypsinogen		300cm/h	≤0.3Mpa		

## Virus, virus/microbial antigen purification affinity medium

Product Name	Lysozyme load (mg/ml)	Particle size range	Maximum flow rate	Withstand stress	PH stability	Application
PS Focurose HPL	≥3 mg/ml Trypsinogen	45-165µm	300 (16mmX300mm)	≤0.3Mpa	5-12(Short term) 5-12(Long term)	20% ethanol 4-30°C

PS Focurose HPL is a specific affinity filler, suitable for affinity chromatography purification of viruses, virus-like particles, and certain specific antigens and proteins.

## Affinity media for plasmid purification

Product Name	Combined load	Particle size range	Maximum flow rate	Withstand stress	PH stability	Storage solution/ temperature
Plasmid Focurose HPR	≥2mg(pDNA)/ ml(medium)	25-45µm	≥220cm/h	≤0.5Mpa	3-11(Long term) 2-13(Short term)	20% ethanol 4-8°C

## Hydrophobic chromatography media

### Hydrophobic chromatography media product list

Product Name	Ligand concentration μ mol/ml	Particle size range	Maximum flow rate	Withstand stress	PH stability	Application
Phenyl Focurose 6FF(HS)	40	45-165μm	400cm/h	≤0.3Mpa	2-14(Short term) 3-13(Long term)	Separation and purification of various proteins, suitable for the purification of substances containing aromatic groups, and further purification after desalting.
Butyl Focurose 4FF	40		400cm/h		2-14(Short term) 3-13(Long term)	
Octyl Focurose 4FF	5		250cm/h		2-14(Short term) 3-13(Long term)	

In addition to the above products, we can also provide hydrophobic chromatography media with a particle size of 25-45μm and a ligand concentration of 10/20/25/50 μmol/ml.

### Multi-mode chromatography media product list

Product Name	Ligand concentration μ mol/ml	Particle size range	Maximum flow rate	Withstand stress	PH stability	Application
Focore 700	40-85	45-165μm	300-700 cm/h	—	2-14(Short term) 3-13(Long term)	Used for flow-through purification of viruses, virus-like particles, virus vectors, etc.
MMA Focurose HF	90-140			≤0.5Mpa	2-14(Short term) 4-12(Long term)	Mainly used in the medium purification and fine purification of monoclonal antibodies, and can also be used in the fine purification of other biomolecules
MMA Focurose FF	130-200			≤0.3Mpa	2-14(Short term) 4-12(Long term)	
MMC Focurose HF	100-200			≤0.5Mpa	2-14(Short term) 3-12(Long term)	Suitable for moderate purification and fine purification of all charged biomolecules such as proteins, peptides, nucleic acids, etc.
MMC Focurose FF	80-150			≤0.3Mpa	2-14(Short term) 3-12(Long term)	



# Antibodies for Flow Cytometry

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# Antibodies for Flow Cytometry

We provide comprehensive flow cytometry antibodies and a variety of fluorescent dyes to accelerate the scientific research. These reagents can be applied to cell function analysis, cell-specific antigens, protein content, cell activity, cell cycle, cell apoptosis, cell DNA and RNA content, and the intracellular pH value detections, etc. In addition, we also provide professional one-stop solutions for flow cytometry reagents, including flow cytometry antibody raw materials, OEM services for large packaging labeling products, and customized flow cytometry antibody raw materials/products development services, ensure the excellent quality of products and batch-to-batch stability.



- Concentrated in flow cytometry, all antibodies have been proven suitable for flow cytometry technology platforms
- Comprehensive product collections, covering all the applications of flow cytometry
- Accelerate the transformation of laboratory-clinical research-clinical applications by providing flexible choice of fluorescence and supporting clinical testing reagents

## Ordering Information

### Purified Antibodies

CD Marker	Catalog Number	Description	Clone	Isotype	Package size
CD1a	A6021	Purified anti-human CD1a	HI149	mouse IgG1	0.1mg
CD1a	A6021-bulk	Purified anti-human CD1a	HI149	mouse IgG1	bulk
CD1a	A6032	FITC anti-human CD1a	HI149	mouse IgG1	100T
CD1a	A6033	PE anti-human CD1a	HI149	mouse IgG1	100T
CD2	A6041	Purified anti-human CD2	HIT11	mouse IgG1	0.1mg
CD2	A6041-bulk	Purified anti-human CD2	HIT11	mouse IgG1	bulk
CD2	A6001B12	FITC anti-human CD2	HIT11	mouse IgG1	100T
CD2	A6053	PE anti-human CD2	HIT11	mouse IgG1	100T
CD2	A6055	APC anti-human CD2	HIT11	mouse IgG1	100T
CD3	A6061	Purified anti-human CD3	HIT3a	mouse IgG2a	0.1mg
CD3	A6061-bulk	Purified anti-human CD3	HIT3a	mouse IgG2a	bulk
CD3	A6072	FITC anti-human CD3	HIT3a	mouse IgG2a	100T
CD3	A6073	PE anti-human CD3	HIT3a	mouse IgG2a	100T
CD3	A6075	APC anti-human CD3	HIT3a	mouse IgG2a	100T
CD3	A6076	PE-Cy5 anti-human CD3	HIT3a	mouse IgG2a	100T
CD3	A7021	Purified anti-human CD3	HIT3b	mouse IgG1	0.1mg
CD3	A7021-bulk	Purified anti-human CD3	HIT3b	mouse IgG1	bulk
CD3	A7032	FITC anti-human CD3	HIT3b	mouse IgG1	100T
CD3	A7033	PE anti-human CD3	HIT3b	mouse IgG1	100T
CD3	A7034	PerCP anti-human CD3	HIT3b	mouse IgG1	100T
CD3	A7035	APC anti-human CD3	HIT3b	mouse IgG1	100T

CD Marker	Catalog Number	Description	Clone	Isotype	Package size
CD3	A3711	QB500 anti-human CD3	HIT3b	mouse IgG1	100T
CD3	A3391	QB450 anti-human CD3	HIT3b	mouse IgG1	100T
CD3	A7581	Purified anti-human CD3	UCHT1	mouse IgG1	0.1mg
CD3	A7581-bulk	Purified anti-human CD3	UCHT1	mouse IgG1	bulk
CD3	A6002B12	FITC anti-human CD3	UCHT1	mouse IgG1	100T
CD3	A7593	PE anti-human CD3	UCHT1	mouse IgG1	100T
CD3	A6002R12	APC anti-human CD3	UCHT1	mouse IgG1	100T
CD3	A7597	APC-Cy7 anti-human CD3	UCHT1	mouse IgG1	100T
CD3	610008	PerCP anti-human CD3	UCHT1	mouse IgG1	100T
CD3	A6002B52	PerCP-Cy5.5 anti-human CD3	UCHT1	mouse IgG1	100T
CD4	A6081	Purified anti-human CD4	HIT4a	mouse IgG2b	0.1mg
CD4	A6081-bulk	Purified anti-human CD4	HIT4a	mouse IgG2b	bulk
CD4	A6092	FITC anti-human CD4	HIT4a	mouse IgG2b	100T
CD4	A6093	PE anti-human CD4	HIT4a	mouse IgG2b	100T
CD4	A6095	APC anti-human CD4	HIT4a	mouse IgG2b	100T
CD4	A6003B72	PE-Cy7 anti-human CD4	SK3	mouse IgG1	100T
CD4	A7601	Purified anti-human CD4	RPA-T4	mouse IgG1	0.1mg
CD4	A7601-bulk	Purified anti-human CD4	RPA-T4	mouse IgG1	bulk
CD4	A6003B12	FITC anti-human CD4	RPA-T4	mouse IgG1	100T
CD4	A6003B22	PE anti-human CD4	RPA-T4	mouse IgG1	100T
CD4	A3155	APC anti-human CD4	RPA-T4	mouse IgG1	100T
CD4	A3157	APC-Cy7 anti-human CD4	RPA-T4	mouse IgG1	100T
CD4	A0004	Percp-Cy5.5 anti-human CD4	RPA-T4	mouse IgG1	100T
CD4	A6003V22	QB450 anti-human CD4	RPA-T4	mouse IgG1	100T
CD4	A3156	PE-Cy5 anti-human CD4	RPA-T4	mouse IgG1	100T
CD5	A6101	Purified anti-human CD5	HISM2	mouse IgG1	0.1mg
CD5	A6101-bulk	Purified anti-human CD5	HISM2	mouse IgG1	bulk
CD5	A6112	FITC anti-human CD5	HISM2	mouse IgG1	100T
CD5	A6113	PE anti-human CD5	HISM2	mouse IgG1	100T
CD5	A6004R12	APC anti-human CD5	HISM2	mouse IgG1	100T
CD6	A6121	Purified anti-human CD6	HI210	mouse IgG1	0.1mg
CD6	A6121-bulk	Purified anti-human CD6	HI210	mouse IgG1	bulk
CD6	A6132	FITC anti-human CD6	HI210	mouse IgG1	100T
CD6	A6133	PE anti-human CD6	HI210	mouse IgG1	100T
CD7	A6141	Purified anti-human CD7	HIT7	mouse IgG1	0.1mg
CD7	A6141-bulk	Purified anti-human CD7	HIT7	mouse IgG1	bulk

CD Marker	Catalog Number	Description	Clone	Isotype	Package size
CD7	A6005B12	FITC anti-human CD7	HIT7	mouse IgG1	100T
CD7	A6153	PE anti-human CD7	HIT7	mouse IgG1	100T
CD7	A6005R12	APC anti-human CD7	HIT7	mouse IgG1	100T
CD7	A6005V22	QB450 anti-human CD7	HIT7	mouse IgG1	100T
CD8	A6161	Purified anti-human CD8	HIT8a	mouse IgG1	0.1mg
CD8	A6161-bulk	Purified anti-human CD8	HIT8a	mouse IgG1	bulk
CD8	A6006B12	FITC anti-human CD8	HIT8a	mouse IgG1	100T
CD8	A6173	PE anti-human CD8	HIT8a	mouse IgG1	100T
CD8	A6006R12	APC anti-human CD8	HIT8a	mouse IgG1	100T
CD8	A6006R32	APC-Cy7 anti-human CD8	HIT8a	mouse IgG1	100T
CD8	A6006B42	Percp anti-human CD8	HIT8a	mouse IgG1	100T
CD8	A3651	QB450 anti-human CD8	HIT8a	mouse IgG1	100T
CD9	A6181	Purified anti-human CD9	HI9a	mouse IgG1	0.1mg
CD9	A6181-bulk	Purified anti-human CD9	HI9a	mouse IgG1	bulk
CD9	A6192	FITC anti-human CD9	HI9a	mouse IgG1	100T
CD9	A6193	PE anti-human CD9	HI9a	mouse IgG1	100T
CD10	A6201	Purified anti-human CD10	HI10a	mouse IgG1	0.1mg
CD10	A6201-bulk	Purified anti-human CD10	HI10a	mouse IgG1	bulk
CD10	A6212	FITC anti-human CD10	HI10a	mouse IgG1	100T
CD10	A6007B22	PE anti-human CD10	HI10a	mouse IgG1	100T
CD10	A6215	APC anti-human CD10	HI10a	mouse IgG1	100T
CD10	A6217	APC-Cy7 anti-human CD10	HI10a	mouse IgG1	100T
CD10	A6007B72	PE-Cy7 anti-human CD10	HI10a	mouse IgG1	100T
CD11a	A6221	Purified anti-human CD11a	HI111	mouse IgG1	0.1mg
CD11a	A6221-bulk	Purified anti-human CD11a	HI111	mouse IgG1	bulk
CD11a	A6232	FITC anti-human CD11a	HI111	mouse IgG1	100T
CD11a	A6233	PE anti-human CD11a	HI111	mouse IgG1	100T
CD11b	A6241	Purified anti-human CD11b	HI11b	mouse IgG2b	0.1mg
CD11b	A6241-bulk	Purified anti-human CD11b	HI11b	mouse IgG2b	bulk
CD11b	A6252	FITC anti-human CD11b	HI11b	mouse IgG2b	100T
CD11b	A6253	PE anti-human CD11b	HI11b	mouse IgG2b	100T
CD11b	A6255	APC anti-human CD11b	HI11b	mouse IgG2b	100T
CD13	A3001	Purified anti-human CD13	WM15	mouse IgG1	0.1mg
CD13	A3001-bulk	Purified anti-human CD13	WM15	mouse IgG1	bulk
CD13	A6009B22	PE anti-human CD13	WM15	mouse IgG1	100T
CD13	A6009R12	APC anti-human CD13	WM15	mouse IgG1	100T

CD Marker	Catalog Number	Description	Clone	Isotype	Package size
CD14	A6281	Purified anti-human CD14	HI221	mouse IgM	0.1mg
CD14	A6281-bulk	Purified anti-human CD14	HI221	mouse IgM	bulk
CD14	A6292	FITC anti-human CD14	HI221	mouse IgM	100T
CD14	A6010B12	FITC anti-human CD14	MEM-15	mouse IgG1	100T
CD14	A3171	PE anti-human CD14	MEM-15	mouse IgG1	100T
CD14	A3175	APC anti-human CD14	MEM-15	mouse IgG1	100T
CD14	A3177	APC-Cy7 anti-human CD14	MEM-15	mouse IgG1	100T
CD14	A3512	QB450 anti-human CD14	MEM-15	mouse IgG1	100T
CD15	A6301	Purified anti-human CD15	HI98	mouse IgM	0.1mg
CD15	A6301-bulk	Purified anti-human CD15	HI98	mouse IgM	bulk
CD15	A6312	FITC anti-human CD15	HI98	mouse IgM	100T
CD15	A6313	PE anti-human CD15	HI98	mouse IgM	100T
CD16	A6321	Purified anti-human CD16	HI16a	mouse IgG1	0.1mg
CD16	A6321-bulk	Purified anti-human CD16	HI16a	mouse IgG1	bulk
CD16	A6011B11	FITC anti-human CD16	HI16a	mouse IgG1	100T
CD16	A6011B22	PE anti-human CD16	HI16a	mouse IgG1	100T
CD16	A6340	PE-Cy7 anti-human CD16	HI16a	mouse IgG1	100T
CD16	A3831	QB450 anti-human CD16	HI16a	mouse IgG1	100T
CD16	A3021	Purified anti-human CD16	3G8	mouse IgG1	0.1mg
CD16	A3021-bulk	Purified anti-human CD16	3G8	mouse IgG1	bulk
CD16	A3035	APC anti-human CD16	3G8	mouse IgG1	100T
CD18	A6341	Purified anti-human CD18	HI18a	mouse IgG1	0.1mg
CD18	A6341-bulk	Purified anti-human CD18	HI18a	mouse IgG1	bulk
CD18	A6352	FITC anti-human CD18	HI18a	mouse IgG1	100T
CD19	A6361	Purified anti-human CD19	HI19a	mouse IgG1	0.1mg
CD19	A6361-bulk	Purified anti-human CD19	HI19a	mouse IgG1	bulk
CD19	A6372	FITC anti-human CD19	HI19a	mouse IgG1	100T
CD19	A6373	PE anti-human CD19	HI19a	mouse IgG1	100T
CD19	A6374	Percp anti-human CD19	HI19a	mouse IgG1	100T
CD19	A3851	Percp-Cy5.5 anti-human CD19	HI19a	mouse IgG1	100T
CD19	A6380	PE-Cy7 anti-human CD19	HI19a	mouse IgG1	100T
CD19	Z6410014	APC anti-human CD19	HI19a	mouse IgG1	50T
CD19	A6377	APC-Cy7 anti-human CD19	HI19a	mouse IgG1	100T
CD20	A7221	Purified anti-human CD20	HI47	mouse IgG3	0.1mg
CD20	A7221-bulk	Purified anti-human CD20	HI47	mouse IgG3	bulk
CD20	A7233	PE anti-human CD20	HI47	mouse IgG3	100T



CD Marker	Catalog Number	Description	Clone	Isotype	Package size
CD20	A6381	Purified anti-human CD20	HI20a	mouse IgG2a	0.1mg
CD20	A6381-bulk	Purified anti-human CD20	HI20a	mouse IgG2a	bulk
CD20	A6392	FITC anti-human CD20	HI20a	mouse IgG2a	100T
CD21	A6401	Purified anti-human CD21	HI21a	mouse IgG2a	0.1mg
CD21	A6401-bulk	Purified anti-human CD21	HI21a	mouse IgG2a	bulk
CD21	A6412	FITC anti-human CD21	HI21a	mouse IgG2a	100T
CD22	A6421	Purified anti-human CD22	HIB22	mouse IgG1	0.1mg
CD22	A6421-bulk	Purified anti-human CD22	HIB22	mouse IgG1	bulk
CD22	A6432	FITC anti-human CD22	HIB22	mouse IgG1	100T
CD22	A6433	PE anti-human CD22	HIB22	mouse IgG1	100T
CD24	A6461	Purified anti-human CD24	HI45	mouse IgG1	0.1mg
CD24	A6461-bulk	Purified anti-human CD24	HI45	mouse IgG1	bulk
CD25	A6481	Purified anti-human CD25	HI25a	mouse IgG1	0.1mg
CD25	A6481-bulk	Purified anti-human CD25	HI25a	mouse IgG1	bulk
CD25	A6492	FITC anti-human CD25	HI25a	mouse IgG1	100T
CD25	A6493	PE anti-human CD25	HI25a	mouse IgG1	100T
CD25	A6012B72	PE-Cy7 anti-human CD25	HI25a	mouse IgG1	100T
CD25	A6012R12	APC anti-human CD25	HI25a	mouse IgG1	100T
CD27	A7821	Purified anti-human CD27	HIQ27	/	0.1mg
CD27	A7821-bulk	Purified anti-human CD27	HIQ27	/	bulk
CD29	A6501	Purified anti-human CD29	HI29a	mouse IgG1	0.1mg
CD29	A6501-bulk	Purified anti-human CD29	HI29a	mouse IgG1	bulk
CD29	A6512	FITC anti-human CD29	HI29a	mouse IgG1	100T
CD29	A6513	PE anti-human CD29	HI29a	mouse IgG1	100T
CD33	A6521	Purified anti-human CD33	HI33a	mouse IgG2a	0.1mg
CD33	A6521-bulk	Purified anti-human CD33	HI33a	mouse IgG2a	bulk
CD33	A6532	FITC anti-human CD33	HI33a	mouse IgG2a	100T
CD33	A6533	PE anti-human CD33	HI33a	mouse IgG2a	100T
CD33	A6013R12	APC anti-human CD33	HI33a	mouse IgG2a	100T
CD33	A7081	Purified anti-human CD33	HIM3-4	mouse IgG1	0.1mg
CD33	A7081-bulk	Purified anti-human CD33	HIM3-4	mouse IgG1	bulk
CD33	A7092	FITC anti-human CD33	HIM3-4	mouse IgG1	100T
CD33	A7093	PE anti-human CD33	HIM3-4	mouse IgG1	100T
CD34	A6541	Purified anti-human CD34	4H11	mouse IgG1	0.1mg
CD34	A6541-bulk	Purified anti-human CD34	4H11	mouse IgG1	bulk
CD34	A6552	FITC anti-human CD34	4H11	mouse IgG1	100T

CD Marker	Catalog Number	Description	Clone	Isotype	Package size
CD34	A6553	PE anti-human CD34	4H11	mouse IgG1	100T
CD34	A6555	APC anti-human CD34	4H11	mouse IgG1	100T
CD34	A6554	Percp anti-human CD34	4H11	mouse IgG1	100T
CD34	6610409	Percp-Cy5.5 anti-human CD34	4H11	mouse IgG1	100T
CD38	A6581	Purified anti-human CD38	HIT2	mouse IgG1	0.1mg
CD38	A6581-bulk	Purified anti-human CD38	HIT2	mouse IgG1	bulk
CD38	A6014B12	FITC anti-human CD38	HIT2	mouse IgG1	100T
CD38	A6593	PE anti-human CD38	HIT2	mouse IgG1	100T
CD38	A6594	Percp anti-human CD38	HIT2	mouse IgG1	100T
CD38	6610697	APC anti-human CD38	HIT2	mouse IgG1	100T
CD38	A6014B72	PE-Cy7 anti-human CD38	HIT2	mouse IgG1	100T
CD38	A3811	QB450 anti-human CD38	HIT2	mouse IgG1	100T
CD38	A7261	Purified anti-human CD38	HI157	mouse IgG2a	0.1mg
CD38	A7261-bulk	Purified anti-human CD38	HI157	mouse IgG2a	bulk
CD40	A6601	Purified anti-human CD40	HI40a	mouse IgG2b	0.1mg
CD40	A6601-bulk	Purified anti-human CD40	HI40a	mouse IgG2b	bulk
CD40	A6612	FITC anti-human CD40	HI40a	mouse IgG2b	100T
CD41	A6621	Purified anti-human CD41	HIP8	mouse IgG1	0.1mg
CD41	A6621-bulk	Purified anti-human CD41	HIP8	mouse IgG1	bulk
CD41	A6632	FITC anti-human CD41	HIP8	mouse IgG1	100T
CD41	A6633	PE anti-human CD41	HIP8	mouse IgG1	100T
CD41	A7281	Purified anti-human CD41	HIP2	mouse IgG3	0.1mg
CD41	A7281-bulk	Purified anti-human CD41	HIP2	mouse IgG3	bulk
CD42b	A6641	Purified anti-human CD42b	HIP1	mouse IgG1	0.1mg
CD42b	A6641-bulk	Purified anti-human CD42b	HIP1	mouse IgG1	bulk
CD42b	A6652	FITC anti-human CD42b	HIP1	mouse IgG1	100T
CD42b	A6653	PE anti-human CD42b	HIP1	mouse IgG1	100T
CD43	A6661	Purified anti-human CD43	HI165	mouse IgG1	0.1mg
CD43	A6661-bulk	Purified anti-human CD43	HI165	mouse IgG1	bulk
CD44	A6681	Purified anti-human CD44	HI44a	mouse IgG2a	0.1mg
CD44	A6681-bulk	Purified anti-human CD44	HI44a	mouse IgG2a	bulk
CD44	A6693	PE anti-human CD44	HI44a	mouse IgG2a	100T
CD45	A6701	Purified anti-human CD45	HI30	mouse IgG1	0.1mg
CD45	A6701-bulk	Purified anti-human CD45	HI30	mouse IgG1	bulk
CD45	A6712	FITC anti-human CD45	HI30	mouse IgG1	100T
CD45	A6713	PE anti-human CD45	HI30	mouse IgG1	100T

CD Marker	Catalog Number	Description	Clone	Isotype	Package size
CD45	A6714	PerCP anti-human CD45	HI30	mouse IgG1	100T
CD45	6610889	Percp-Cy5.5 anti-human CD45	HI30	mouse IgG1	100T
CD45	A6715	APC anti-human CD45	HI30	mouse IgG1	100T
CD45	A6716	PE-Cy5 anti-human CD45	HI30	mouse IgG1	100T
CD45	A6720	PE-Cy7 anti-human CD45	HI30	mouse IgG1	100T
CD45	A3452	QB450 anti-human CD45	HI30	mouse IgG1	100T
CD45	A6015V32	QB500 anti-human CD45	HI30	mouse IgG1	100T
CD45	A3871	QB540 anti-human CD45	HI30	mouse IgG1	100T
CD45	A7301	Purified anti-human CD45	HI73	mouse IgG2a	0.1mg
CD45	A7301-bulk	Purified anti-human CD45	HI73	mouse IgG2a	bulk
CD45	A7321	Purified anti-human CD45	HI151	mouse IgG1	0.1mg
CD45	A7321-bulk	Purified anti-human CD45	HI151	mouse IgG1	bulk
CD45	A7341	Purified anti-human CD45	HI185	mouse IgG1	0.1mg
CD45	A7341-bulk	Purified anti-human CD45	HI185	mouse IgG1	bulk
CD45RA	A6721	Purified anti-human CD45RA	HI100	mouse IgG2b	0.1mg
CD45RA	A6721-bulk	Purified anti-human CD45RA	HI100	mouse IgG2b	bulk
CD45RA	A6026B12	FITC anti-human CD45RA	HI100	mouse IgG2b	100T
CD45RA	A6740	PE-Cy7 anti-human CD45RA	HI100	mouse IgG2b	100T
CD45RA	A6735	APC anti-human CD45RA	HI100	mouse IgG2b	100T
CD45RA	A6737	APC-Cy7 anti-human CD45RA	HI100	mouse IgG2b	100T
CD45RO	A3341	Purified anti-human CD45RO	UCHL1	mouse IgG2a	0.1mg
CD45RO	A3341-bulk	Purified anti-human CD45RO	UCHL1	mouse IgG2a	bulk
CD45RO	A3352	FITC anti-human CD45RO	UCHL1	mouse IgG2a	100T
CD45RO	A3353	PE anti-human CD45RO	UCHL1	mouse IgG2a	100T
CD45RO	A6027R12	APC anti-human CD45RO	UCHL1	mouse IgG2a	100T
CD45RO	A3357	APC-Cy7 anti-human CD45RO	UCHL1	mouse IgG2a	100T
CD47	A7361	Purified anti-human CD47	HIRH47	mouse IgG1	0.1mg
CD47	A7361-bulk	Purified anti-human CD47	HIRH47	mouse IgG1	bulk
CD47	A7381	Purified anti-human CD47R	HI172	mouse IgG1	0.1mg
CD47	A7381-bulk	Purified anti-human CD47R	HI172	mouse IgG1	bulk
CD52	A6741	Purified anti-human CD52	HI186	mouse IgG2a	0.1mg
CD52	A6741-bulk	Purified anti-human CD52	HI186	mouse IgG2a	bulk
CD52	A6752	FITC anti-human CD52	HI186	mouse IgG2a	100T
CD53	A6761	Purified anti-human CD53	HI29	mouse IgG1	0.1mg
CD53	A6761-bulk	Purified anti-human CD53	HI29	mouse IgG1	bulk
CD53	A7401	Purified anti-human CD53	HI36	mouse IgG3	0.1mg

CD Marker	Catalog Number	Description	Clone	Isotype	Package size
CD53	A7401-bulk	Purified anti-human CD53	HI36	mouse IgG3	bulk
CD55	A6781	Purified anti-human CD55	HI55a	mouse IgG2a	0.1mg
CD55	A6781-bulk	Purified anti-human CD55	HI55a	mouse IgG2a	bulk
CD55	A6792	FITC anti-human CD55	HI55a	mouse IgG2a	100T
CD55	A6016B22	PE anti-human CD55	HI55a	mouse IgG2a	100T
CD55	A6795	APC anti-human CD55	HI55a	mouse IgG2a	100T
CD56	A6801	Purified anti-human CD56	B-A19	mouse IgG1	0.1mg
CD56	A6801-bulk	Purified anti-human CD56	B-A19	mouse IgG1	bulk
CD56	A6017B22	PE anti-human CD56	B-A19	mouse IgG1	100T
CD56	A6017R12	APC anti-human CD56	B-A19	mouse IgG1	100T
CD56	A6817	APC-Cy7 anti-human CD56	B-A19	mouse IgG1	100T
CD57	A6821	Purified anti-human CD57	HI57a	mouse IgM	0.1mg
CD57	A6821-bulk	Purified anti-human CD57	HI57a	mouse IgM	bulk
CD57	A6835	APC anti-human CD57	HI57a	mouse IgM	100T
CD58	A6841	Purified anti-human CD58	HI58a	mouse IgG1	0.1mg
CD58	A6841-bulk	Purified anti-human CD58	HI58a	mouse IgG1	bulk
CD58	A6852	FITC anti-human CD58	HI58a	mouse IgG1	100T
CD58	A6853	PE anti-human CD58	HI58a	mouse IgG1	100T
CD59	A6018B12	FITC anti-human CD59	MEM43/5	mouse IgG2b	100T
CD59	A6873	PE anti-human CD59	MEM43/5	mouse IgG2b	100T
CD62E	A7421	Purified anti-human CD62E	HI62E	mouse IgG2a	0.1mg
CD62E	A7421-bulk	Purified anti-human CD62E	HI62E	mouse IgG2a	bulk
CD62L	A6881	Purified anti-human CD62L	HI62L	mouse IgG2a	0.1mg
CD62L	A6881-bulk	Purified anti-human CD62L	HI62L	mouse IgG2a	bulk
CD62L	A6893	PE anti-human CD62L	HI62L	mouse IgG2a	100T
CD62L	A6910	PE-Cy7 anti-human CD62L	HI62L	mouse IgG2a	100T
CD62P	A6901	Purified anti-human CD62p	HI62P	mouse IgG1	0.1mg
CD62P	A6901-bulk	Purified anti-human CD62p	HI62P	mouse IgG1	bulk
CD62P	A6913	PE anti-human CD62p	HI62P	mouse IgG1	100T
CD62P	A6915	APC anti-human CD62p	HI62P	mouse IgG1	100T
CD64	A3041	Purified anti-human CD64	0.1	mouse IgG1	0.1mg
CD64	A6022B12	FITC anti-human CD64	0.1	mouse IgG1	100T
CD64	A6022B22	PE anti-human CD64	0.1	mouse IgG1	100T
CD64	A6022R12	APC anti-human CD64	0.1	mouse IgG1	100T
CD71	A6941	Purified anti-human CD71	HI160	mouse IgG2b	0.1mg
CD71	A6941-bulk	Purified anti-human CD71	HI160	mouse IgG2b	bulk

CD Marker	Catalog Number	Description	Clone	Isotype	Package size
CD71	A7441	Purified anti-human CD71	HI166	mouse IgG1	0.1mg
CD71	A7441-bulk	Purified anti-human CD71	HI166	mouse IgG1	bulk
CD71	A7453	PE anti-human CD71	HI166	mouse IgG1	100T
CD99	A6981	Purified anti-human CD99	HI156	mouse IgG2a	0.1mg
CD99	A6981-bulk	Purified anti-human CD99	HI156	mouse IgG2a	bulk
CD99	A6992	FITC anti-human CD99	HI156	mouse IgG2a	100T
CD99R	A7001	Purified anti-human CD99R	HIT4	mouse IgM	0.1mg
CD99R	A7001-bulk	Purified anti-human CD99R	HIT4	mouse IgM	bulk
CD99R	A7013	PE anti-human CD99R	HIT4	mouse IgM	100T
CD117	A3061	Purified anti-human CD117	104D2	mouse IgG1	0.1mg
CD117	A3072	FITC anti-human CD117	104D2	mouse IgG1	100T
CD117	A6019B22	PE anti-human CD117	104D2	mouse IgG1	100T
CD117	A3080	PE-Cy7 anti-human CD117	104D2	mouse IgG1	100T
CD117	A6019R12	APC anti-human CD117	104D2	mouse IgG1	100T
CD123	A3561	Purified anti-human CD123	HI12H7	mouse IgG1	0.1mg
CD123	A3561-bulk	Purified anti-human CD123	HI12H7	mouse IgG1	bulk
CD123	A3572	FITC anti-human CD123	HI12H7	mouse IgG1	100T
CD123	A3573	PE anti-human CD123	HI12H7	mouse IgG1	100T
CD123	A3575	APC anti-human CD123	HI12H7	mouse IgG1	100T
CD123	A3153	PE anti-human CD123	6H6	mouse IgG1	100T
CD123	A0018	Percp-Cy5.5 anti-human CD123	6H6	mouse IgG1	100T
CD123	6611097	APC anti-human CD123	6H6	mouse IgG1	100T
CD123	A7721	Purified anti-human CD123	HI8D7	mouse IgG1	0.1mg
CD123	A7721-bulk	Purified anti-human CD123	HI8D7	mouse IgG1	bulk
CD123	A6025R12	APC anti-human CD123	HI8D7	mouse IgG1	100T
CD127	A3081	Purified anti-human CD127	A019D5	mouse IgG1	0.1mg
CD127	A6020B22	PE anti-human CD127	A019D5	mouse IgG1	100T
CD127	A6020R12	APC anti-human CD127	A019D5	mouse IgG1	100T
CD138	A3101	Purified anti-human CD138	MI15	mouse IgG1	0.1mg
CD138	A3113	PE anti-human CD138	MI15	mouse IgG1	100T
CD138	A3115	APC anti-human CD138	MI15	mouse IgG1	100T
CD152	A7841	Purified anti-human CD152	HIQ152	/	0.1mg
CD152	A7841-bulk	Purified anti-human CD152	HIQ152	/	bulk
CD235a	A7041	Purified anti-human CD235a	HI264	mouse IgG2a	0.1mg
CD235a	A7041-bulk	Purified anti-human CD235a	HI264	mouse IgG2a	bulk
CD235a	A7052	FITC anti-human CD235a	HI264	mouse IgG2a	100T
CD235ab	A7061	Purified anti-human CD235ab	HIR2	mouse IgG2b	0.1mg
CD235ab	A7061-bulk	Purified anti-human CD235ab	HIR2	mouse IgG2b	bulk
CD235ab	A7072	FITC anti-human CD235ab	HIR2	mouse IgG2b	100T

CD Marker	Catalog Number	Description	Clone	Isotype	Package size
CD269	A7561	Purified anti-human CD269	HIBCMA	mouse IgG1	0.1mg
CD269	A7561-bulk	Purified anti-human CD269	HIBCMA	mouse IgG1	bulk
CD269	A7573	PE anti-human CD269	HIBCMA	mouse IgG1	100T
CD273	A7861	Purified anti-human CD273	HIQB273-1	/	0.1mg
CD273	A7861-bulk	Purified anti-human CD273	HIQB273-1	/	bulk
CD273	A7881	Purified anti-human CD273	HIQB273-2	/	0.1mg
CD273	A7881-bulk	Purified anti-human CD273	HIQB273-2	/	bulk
CD279(PD-1)	A7521	Purified anti-human CD279	HIQB279-2	mouse IgG1	0.1mg
CD279(PD-1)	A7521-bulk	Purified anti-human CD279	HIQB279-2	mouse IgG1	bulk
CD279(PD-1)	A7541	Purified anti-human CD279	HI2E7	mouse IgG1	0.1mg
CD279(PD-1)	A7541-bulk	Purified anti-human CD279	HI2E7	mouse IgG1	bulk
CD279(PD-1)	A7553	PE anti-human CD279	HI2E7	mouse IgG1	100T
CD279(PD-1)	A3771	PE-Cy7 anti-human CD279	HI2E7	mouse IgG1	100T
CD279(PD-1)	A7555	APC anti-human CD279	HI2E7	mouse IgG1	100T
HLA-I	A7141	Purified anti-human HLA-I	HI21	mouse IgG2a	0.1mg
HLA-I	A7141-bulk	Purified anti-human HLA-I	HI21	mouse IgG2a	bulk
HLA-I	A7152	FITC anti-human HLA-I	HI21	mouse IgG2a	100T
HLA-I	A7153	PE anti-human HLA-I	HI21	mouse IgG2a	100T
HLA-DR	A7161	Purified anti-human HLA-DR	HI43	mouse IgG1	0.1mg
HLA-DR	A7161-bulk	Purified anti-human HLA-DR	HI43	mouse IgG1	bulk
HLA-DR	A7172	FITC anti-human HLA-DR	HI43	mouse IgG1	100T
HLA-DR	A7173	PE anti-human HLA-DR	HI43	mouse IgG1	100T
HLA-DR	A7180	PE-Cy7 anti-human HLA-DR	HI43	mouse IgG1	100T
HLA-DR	A0020	Percp-Cy5.5 anti-human HLA-DR	HI43	mouse IgG1	100T
HLA-DR	A6021R12	APC anti-human HLA-DR	HI43	mouse IgG1	100T
HLA-DR	A6021R32	APC-Cy7 anti-human HLA-DR	HI43	mouse IgG1	100T
HLA-DR	A3791	QB700 anti-human HLA-DR	HI43	mouse IgG1	100T
HLA-DQ	A7101	Purified anti-human HLA-DQ	HI118	mouse IgG1	0.1mg
HLA-DQ	A7101-bulk	Purified anti-human HLA-DQ	HI118	mouse IgG1	bulk
Lambda Chain	A7241	Purified anti-human Lambda Chain	HIgλ	mouse IgG1	0.1mg
Lambda Chain	A7241-bulk	Purified anti-human Lambda Chain	HIgλ	mouse IgG1	bulk
Lambda Chain	A3691	PE anti-human Lambda Chain	2D54	mouse IgG2a	100T
Kappa Chain	A7741	Purified anti-human Kappa Chain	HIgK	mouse IgG1	0.1mg
Kappa Chain	A7741-bulk	Purified anti-human Kappa Chain	HIgK	mouse IgG1	bulk
Kappa Chain	A3671	FITC anti-human Kappa Chain	2F1C1	mouse IgG1	100T
Kappa Chain	A3675	APC anti-human Kappa Chain	2F1C1	mouse IgG1	100T
TNF-α	A7641	Purified anti-human TNF-α	HI2A10	mouse IgG1	0.1mg
TNF-α	A7641-bulk	Purified anti-human TNF-α	HI2A10	mouse IgG1	bulk
TNF-α	A3501	Purified anti-human TNF-α	HIXB10	mouse IgG2b	0.1mg

CD Marker	Catalog Number	Description	Clone	Isotype	Package size
TNF- $\alpha$	A3501-bulk	Purified anti-human TNF- $\alpha$	HIXB10	mouse IgG2b	bulk
IFN- $\gamma$	A3541	Purified anti-human INF- $\gamma$	HI59F4	mouse IgG1	0.1mg
IFN- $\gamma$	A3541-bulk	Purified anti-human INF- $\gamma$	HI59F4	mouse IgG1	bulk
IFN- $\gamma$	A3521	Purified anti-human IFN- $\gamma$	HI61E7	mouse IgG1	0.1mg
IFN- $\gamma$	A3521-bulk	Purified anti-human IFN- $\gamma$	HI61E7	mouse IgG1	bulk
CK18	A3721	Purified CK18	HI2A6P	mouse IgG1	0.1mg
CK18	A3721-bulk	Purified CK18	HI2A6P	mouse IgG1	bulk
CK18	A3741	Purified CK18	HI3A9B	mouse IgG2a	0.1mg
CK18	A3741-bulk	Purified CK18	HI3A9B	mouse IgG2a	bulk
CK19	A3581	Purified CK19	HI2G2	mouse IgG2b	0.1mg
CK19	A3581-bulk	Purified CK19	HI2G2	mouse IgG2b	bulk
Mouse IgG1	A2201	Purified mouse IgG1	7D11	mouse IgG1	0.1mg
Mouse IgG1	A2201-bulk	Purified mouse IgG1	7D11	mouse IgG1	bulk
Mouse IgG1	A6023B12	FITC mouse IgG1	7D11	mouse IgG1	100T
Mouse IgG1	A6023B22	PE mouse IgG1	7D11	mouse IgG1	100T
Mouse IgG1	A2220	PE-Cy7 mouse IgG1	7D11	mouse IgG1	100T
Mouse IgG1	A6023R12	APC mouse IgG1	7D11	mouse IgG1	100T
Mouse IgG1	A2217	APC-Cy7 mouse IgG1	7D11	mouse IgG1	100T
Mouse IgG1	A2214	Percp mouse IgG1	7D11	mouse IgG1	100T
Mouse IgG1	A0016	Percp-Cy5.5 mouse IgG1	7D11	mouse IgG1	100T
Mouse IgG1	A2261	Purified mouse IgG1	1F8	mouse IgG1	0.1mg
Mouse IgG1	A2261-bulk	Purified mouse IgG1	1F8	mouse IgG1	bulk
Mouse IgG1	A2272	FITC mouse IgG1	1F8	mouse IgG1	100T
Mouse IgG1	A2273	PE mouse IgG1	1F8	mouse IgG1	100T
Mouse IgG2a	A2221	Purified mouse IgG2a	X5563	mouse IgG2a	0.1mg
Mouse IgG2a	A2221-bulk	Purified mouse IgG2a	X5563	mouse IgG2a	bulk
Mouse IgG2a	A2232	FITC mouse IgG2a	X5563	mouse IgG2a	100T
Mouse IgG2a	A2233	PE mouse IgG2a	X5563	mouse IgG2a	100T
Mouse IgG2a	A2240	PE-Cy7 mouse IgG2a	X5563	mouse IgG2a	100T
Mouse IgG2a	A2235	APC mouse IgG2a	X5563	mouse IgG2a	100T
Mouse IgG2a	A2237	APC-Cy7 mouse IgG2a	X5563	mouse IgG2a	100T
Mouse IgG2a	A0010	PE-DL594 mouse IgG2a	X5563	mouse IgG2a	100T
Mouse IgG2b	A2241	Purified mouse IgG2b	TG2b	mouse IgG2b	0.1mg
Mouse IgG2b	A2241-bulk	Purified mouse IgG2b	TG2b	mouse IgG2b	bulk
Mouse IgG2b	A2252	FITC mouse IgG2b	TG2b	mouse IgG2b	100T
Mouse IgG2b	A2253	PE mouse IgG2b	TG2b	mouse IgG2b	100T
Mouse IgG2b	A2254	Percp mouse IgG2b	TG2b	mouse IgG2b	100T
Mouse IgG2b	A2260	PE-Cy7 mouse IgG2b	TG2b	mouse IgG2b	100T
Mouse IgM	A2281	Purified mouse IgM	HILE6	mouse IgM	0.1mg

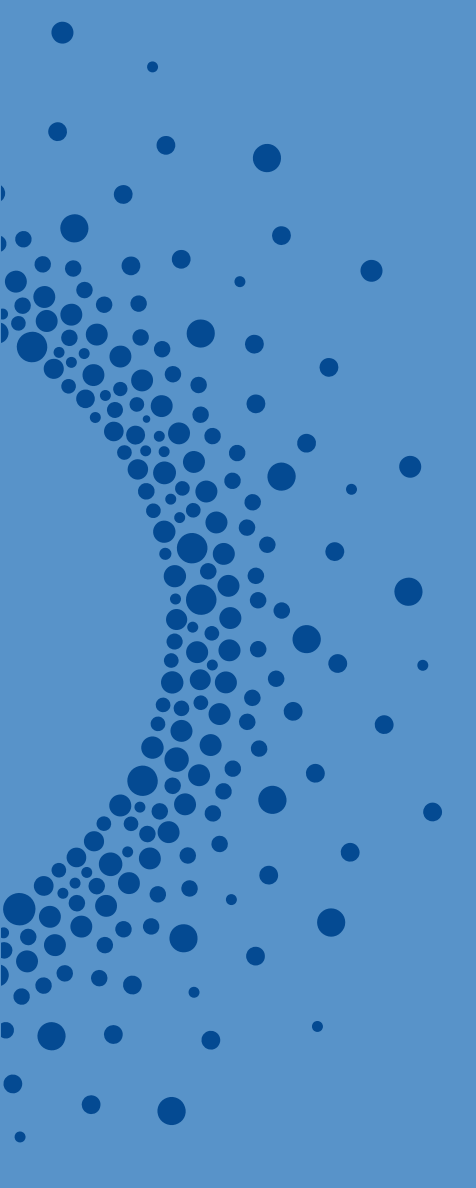
CD Marker	Catalog Number	Description	Clone	Isotype	Package size
Mouse IgM	A2281-bulk	Purified mouse IgM	HILE6	mouse IgM	bulk
Mouse IgM	A2292	FITC mouse IgM	HILE6	mouse IgM	100T
CD3 FITC/ CD4 PE/ CD45 Percp	B6031	CD3 FITC/CD4 PE/CD45 Percp	UCHT1/ RPA-T4/HI30	/	50T
CD3 FITC/ CD8 PE/ CD45 Percp/ CD4 APC	B6032	CD3 FITC/CD8 PE/CD45 Percp/ CD4 APC	UCHT1/HIT8a/ HI30/RPA-T4	/	50T
CD3 FITC/ CD16+56 PE/ CD45 Percp/ CD19 APC	B6033	CD3 FITC/CD16+56 PE/ CD45 Percp/CD19 APC	UCHT1/ HI16a+B-A19/ HI30/HI19a	/	50T
CD3 FITC/ CD16+56 PE/ CD45 Percp- Cy5.5/ CD4 PE-Cy7/ CD19 APC/ CD8 APC-Cy7	B6034	CD3 FITC/CD16+56 PE/ CD45 Percp-Cy5.5/CD4 PE-Cy7/ CD19 APC/CD8 APC-Cy7	UCHT1/ HI16a+B-A19/ HI30/RPA-T/ HI19a/HIT8a	/	50T
CD4 FITC/ CD8 PE/ CD3 Percp	B60011	CD4 FITC/CD8 PE/CD3 Percp	RPA-T4/ HIT8a/UCHT1	/	50T
CD3 FITC/ CD16+56 PE	B6035	CD3 FITC/CD16+56 PE	UCHT1/ HI16a+B-A19	/	50T
TS Lysing/ Fixation Solution(10X)	Z6910001S	TS Lysing/Fixation Solution(10X)	/	/	2.5ml
TS Lysing/ Fixation Solution(10X)	Z6910001M	TS Lysing/Fixation Solution(10X)	/	/	10ml
TS Lysing/ Fixation Solution(10X)	Z6910001	TS Lysing/Fixation Solution(10X)	/	/	100ml
TS Lysing Solution(10X)	Z6910011	TS Lysing Solution(10X)	/	/	120ml
Absolute Counting Kit	Z6410004	Absolute Counting Kit	/	/	50T
Absolute Counting Tubes with Fluorescent Beads	D60031	Absolute Counting Tubes with Fluorescent Beads	/	/	10T
Absolute Counting Tubes with Fluorescent Beads	D60032	Absolute Counting Tubes with Fluorescent Beads	/	/	50T



## Fluorescence Channel

Target	Clone	Isotype	Blue 488nm							Red 633nm			Violet 405nm			Unconjugated
			FITC 525nm	PE 575nm	PE-DL594 594nm	PerCP 678nm	PE-Cy5 665nm	PerCP-Cy5.5 695nm	PE-Cy7 779nm	APC 660nm	QB700 719nm	APC-Cy7 779nm	QB450 450nm	QB500 500nm	QB540 540nm	
CD1a	HI149	mouse IgG1	✓	✓												✓
CD2	HIT11	mouse IgG1	✓	✓							✓					✓
CD3	HIT3a	mouse IgG2a	✓	✓				✓			✓					✓
CD3	UCHT1	mouse IgG1	✓	✓			✓		✓		✓		✓			✓
CD3	HIT3b	mouse IgG1	✓	✓			✓				✓		✓	✓		✓
CD4	HIT4a	mouse IgG2b	✓	✓							✓					✓
CD4	RPA-T4	mouse IgG1	✓	✓				✓	✓		✓		✓			✓
CD4	SK3	mouse IgG1							✓							
CD5	HISM2	mouse IgG1	✓	✓							✓					✓
CD6	HI210	mouse IgG1	✓	✓												✓
CD7	HIT7	mouse IgG1	✓	✓							✓			✓		✓
CD8	HIT8a	mouse IgG1	✓	✓			✓				✓		✓			✓
CD9	HI9a	mouse IgG1	✓	✓												✓
CD10	HI10a	mouse IgG1	✓	✓						✓		✓				✓
CD11a	HI111	mouse IgG1	✓	✓												✓
CD11b	HI11b	mouse IgG2b	✓	✓							✓					✓
CD13	WM15	mouse IgG1		✓							✓					✓
CD14	HI221	mouse IgM	✓													✓
CD14	MEM-15	mouse IgG1	✓	✓							✓		✓			
CD15	HI98	mouse IgM	✓	✓												✓
CD16	HI16a	mouse IgG1	✓	✓						✓				✓		✓
CD16	3G8	mouse IgG1	✓	✓							✓					✓
CD18	HI18a	mouse IgG1	✓	✓												✓
CD19	HI19a	mouse IgG1	✓	✓			✓		✓	✓		✓				✓
CD20	HI47	mouse IgG3	✓	✓												✓
CD20	HI20a	mouse IgG2a	✓													✓
CD21	HI21a	mouse IgG2a	✓													✓
CD22	HIB22	mouse IgG1	✓	✓												✓
CD24	HI45	mouse IgG1														✓
CD25	HI25a	mouse IgG1	✓	✓						✓						✓
CD27	HIQ27															✓
CD29	HI29a	mouse IgG1	✓	✓												✓
CD33	HI33a	mouse IgG2a	✓	✓							✓					✓
CD33	HIM3-4	mouse IgG1	✓	✓												✓
CD34	4H11	mouse IgG1	✓	✓			✓		✓							✓
CD38	HIT2	mouse IgG1	✓	✓			✓			✓			✓			✓
CD38	HI157	mouse IgG2a														✓
CD40	HI40a	mouse IgG2b	✓													✓
CD41	HIP8	mouse IgG1	✓	✓												✓
CD41	HIP2	mouse IgG3														✓
CD42b	HIP1	mouse IgG1	✓	✓												✓
CD43	HI165	mouse IgG1														✓
CD44	HI44a	mouse IgG2a		✓												✓
CD45	HI30	mouse IgG1	✓	✓			✓	✓	✓	✓			✓	✓	✓	✓
CD45	HI73	mouse IgG2a														✓
CD45	HI151	mouse IgG1														✓

Target	Clone	Isotype	Blue 488nm					Red 633nm			Violet 405nm			Unconjugated	
			FITC 525nm	PE 575nm	PE-DL594 594nm	PerCP 678nm	PE-Cy5 665nm	PerCP-Cy5.5 695nm	PE-Cy7 779nm	APC 660nm	QB700 719nm	APC-Cy7 779nm	QB450 450nm		QB500 500nm
CD45	HI185	mouse IgG1													
CD45RA	HI100	mouse IgG2b	✓					✓	✓		✓				✓
CD45RO	UCHL1	mouse IgG2a	✓	✓					✓		✓				✓
CD47	HIRH47	mouse IgG1													✓
CD47R	HI172	mouse IgG1													✓
CD52	HI186	mouse IgG2a	✓												✓
CD53	HI29	mouse IgG1													✓
CD53	HI36	mouse IgG3													✓
CD55	HI55a	mouse IgG2a	✓	✓					✓						✓
CD56	B-A19	mouse IgG1		✓					✓		✓				✓
CD57	HI57a	mouse IgM							✓						✓
CD58	HI58a	mouse IgG1	✓	✓											✓
CD59	MEM43/5	mouse IgG2b	✓	✓											✓
CD62E	HI62E	mouse IgG2a													✓
CD62L	HI62L	mouse IgG2a		✓				✓							✓
CD62P	HI62P	mouse IgG1		✓					✓						✓
CD64	10.1	mouse IgG1	✓	✓					✓						✓
CD71	HI160	mouse IgG2b													✓
CD71	HI166	mouse IgG1		✓											✓
CD99	HI156	mouse IgG2a	✓												✓
CD99R	HIT4	mouse IgM		✓											✓
CD117	104D2	mouse IgG1	✓	✓				✓	✓						✓
CD123	6H6	mouse IgG1		✓				✓	✓						✓
CD123	HI12H7	mouse IgG1	✓	✓					✓						✓
CD123	HI8D7	mouse IgG1							✓						✓
CD127	A019D5	mouse IgG1		✓					✓						✓
CD138	MI15	mouse IgG1		✓					✓						✓
CD152	HIQ152														✓
CD235a	HI264	mouse IgG2a	✓												✓
CD235ab	HIR2	mouse IgG2b	✓												✓
CD269	HIBCMA	mouse IgG1		✓											✓
CD273	HIQ273-1														✓
CD273	HIQ273-2														✓
CD279(PD-1)	HI2E7	mouse IgG1		✓				✓	✓						✓
CD279(PD-1)	HQB279-2	mouse IgG1													✓
HLA-I	HI21	mouse IgG2a	✓	✓											✓
HLA-DR	HI43	mouse IgG1	✓	✓			✓	✓	✓	✓					✓
HLA-DQ	HI118	mouse IgG1													✓
Lambda	HIgA	mouse IgG1													✓
Kappa	HIg	mouse IgG1													✓
Lambda	2D54	mouse IgG2a		✓											✓
Kappa	2F1C1	mouse IgG1	✓						✓						✓
TNF-α	HIXB10	mouse IgG2b													✓
TNF-α	HI2A10														✓
IFN-γ	HI61E7	mouse IgG1													✓
IFN-γ	HI59F4	mouse IgG1													✓
CK18	HI2A6P	mouse IgG1													✓
CK18	HI3A9B	mouse IgG2a													✓
CK19	HI2G2	mouse IgG2b													✓
Mouse IgG1	7D11	mouse IgG1	✓	✓		✓		✓	✓		✓				✓
Mouse IgG1	1F8	mouse IgG1	✓	✓											✓
Mouse IgG2a	X5563	mouse IgG2a	✓	✓	✓			✓	✓		✓				✓
Mouse IgG2b	TG1.7	mouse IgG2b	✓	✓		✓		✓							✓
Mouse IgM	HILE6	mouse IgM	✓												✓



# BeamCyte™ Flow Cytometer

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# BeamCyte™ Flow Cytometer

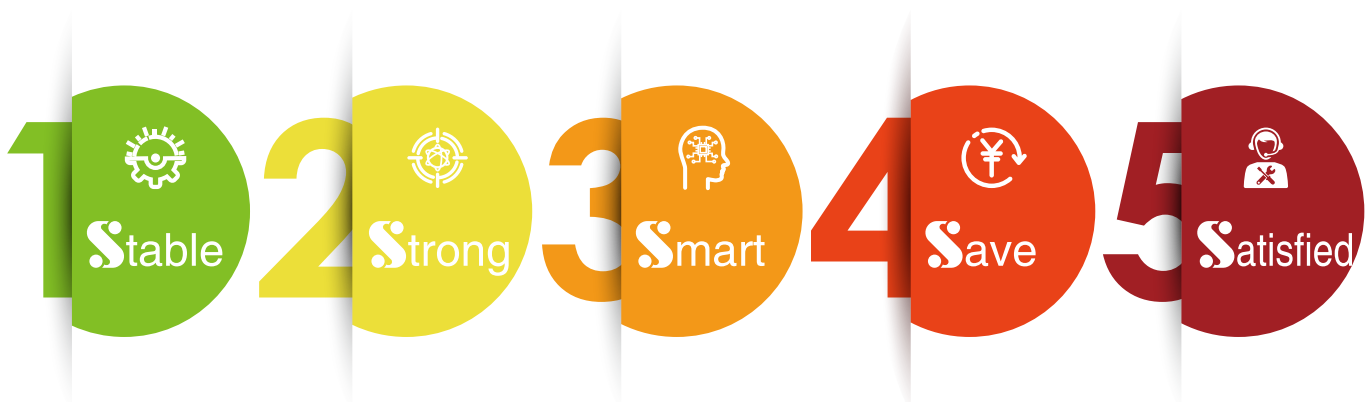
The configuration of BeamCyte™ is Flexible , and can be upgraded from the original machine. Automatic high flux sampling system could be compatible with standard 40 flow tube racks as well as 96-well plates. Sample preprocessor would be cascaded to the machine and to realize analytical automation process



## BeamCyte™ Configuration List

Configuration			488 nm Laser				638 nm Laser	
No. of lasers	Fluorescence channels	Total No. of channels	FITC	PE	PerCP	PE-Cy 7	APC	APC-Cy 7
			530/30 BP	585/42 BP	700/54 BP	785/55 BP	660/20 BP	785/55 BP
1	4	6	•	•	•	•		
2	4	6	•	•	•		•	
2	6	8	•	•	•	•	•	•

Stable, efficient , low-consumption and intelligent flow cytometer provides **“5S”** standard solution for your analysis

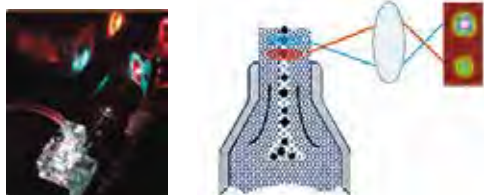


Semiconductor laser with the function of TEC temperature control, the wavelength of two lasers : 488 nm, 638 nm; standard power 20 mW, and 40 mW / 60 mW can be customized. Lasers can provide efficient and stable source to maintain the uniformity of sample analysis and achieve standardization.



Technology of Independent Development lasers

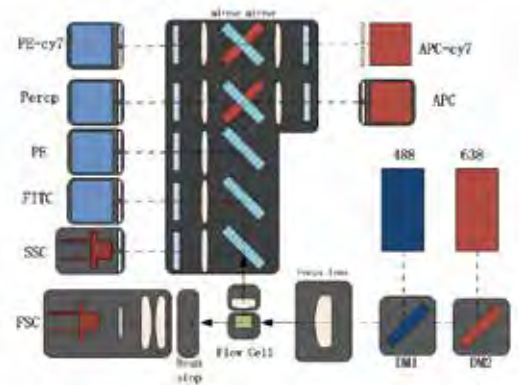
The excitation and receiving of solid spatial is separated (Patent design), so that there is no crosstalk between the channels from different laser, and the adjustment of the compensation is simplified.



Spatial coupling technique

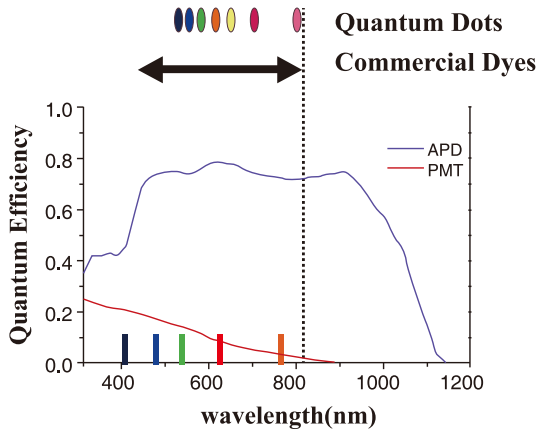
WDM module (independent patent), with the optical path design Locked and fixed, which maintains the high stability and high precision of the optical path after vibration, to ensure the stability of the detection signal.

High performance filters reduce signal loss and effectively collects weak fluorescence signal.

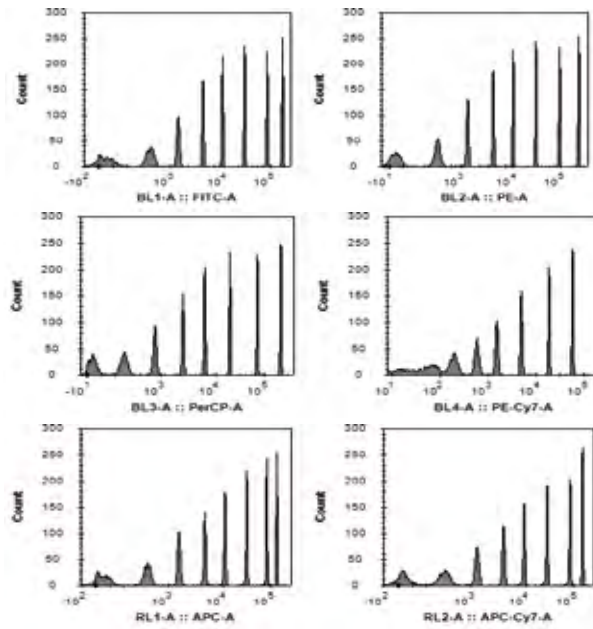


Avalanche photodiode detector (APD), has higher incident photon-to-electron conversion efficiency (IPCE) , as well as lower electronic noise. Stable performance helps improve the resolution and fluorescence sensitivity of the instrument, to ensure the repeatability of analytical results and realize the standardization .

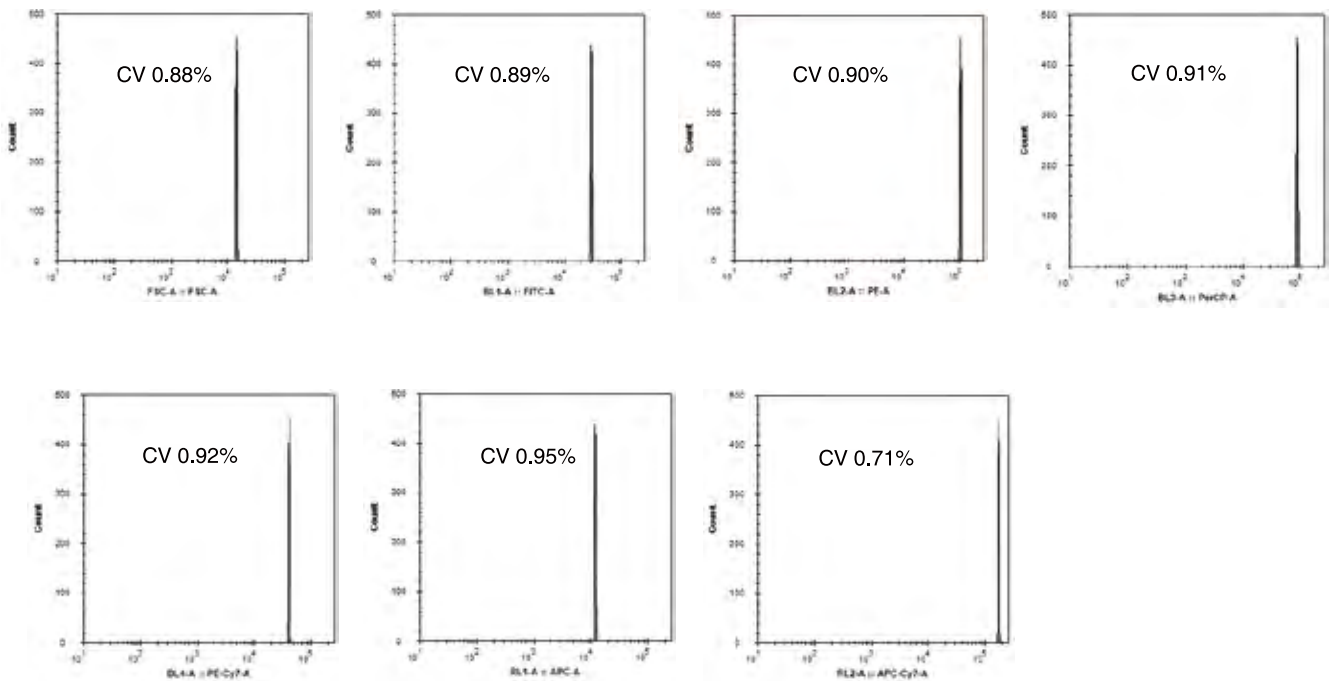
Higher fluorescence sensitivity ensures that weak fluorescence signal can be detected.



Quantum Efficiency for the R3896 PMT and the RMD avalanche photodiode (APD) as a function of wavelength.



Based on the sensitivity detection of Spherotech RCP305A Rainbow 8 Peaks microsphere, 8 peaks can be realized in each channel



Based on the resolution detection of Spherotech UFRP302 Rainbow Single Peak microsphere, CVs of all channels are less than 2%

Automatic high flux sampling system could be compatible with standard 40 flow tube racks as well as 96-well plates. Sample preprocessor would be cascaded to the machine and to realize analytical automation process.

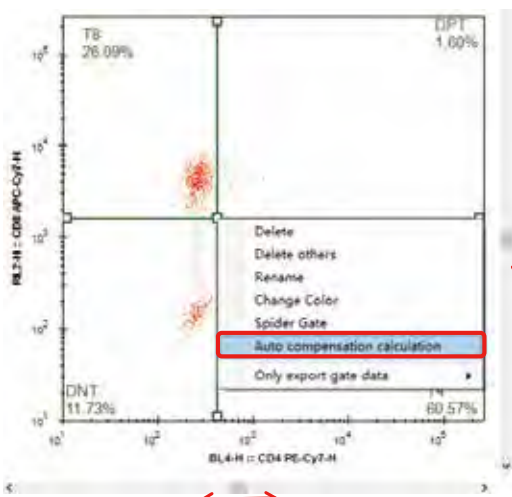
The high-precision sampling pump can accurately control and measure the sampling volume, which can realize the absolute count of the events by volume method with high accuracy.

The software has both English and Chinese version, and the UI interface is simple to learn and easy to operate. Multiple and convenient compensation adjustment can meet comprehensive needs.

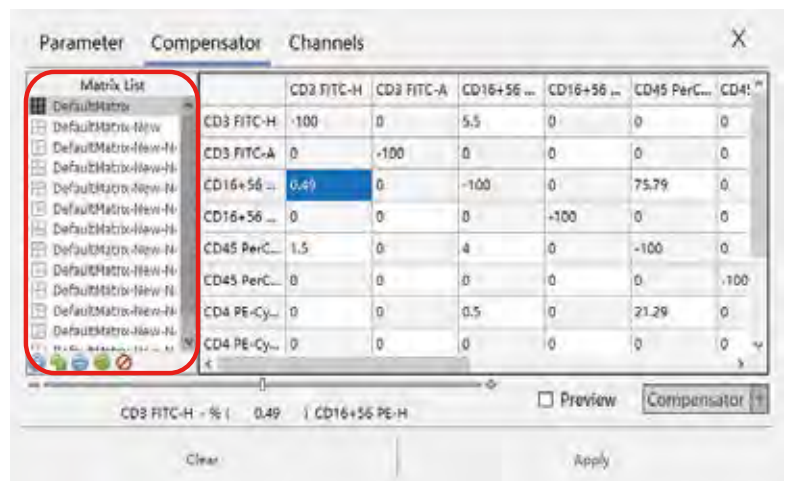
Compatible with clinical LIS software: to facilitate data graphic transmission.

Automated quality control: software would draw Levey-Jennings curve automatically.

Pre-load module upon engineer installation: customers would run standard assays such as TBNK and Cytokine to realize standard processing and data analysis spontaneously.



Quick Compensation & Auto Compensation Calculation



Parameter	Compensator	Channels	CD3 FITC-H	CD3 FITC-A	CD16+56 ...	CD16+56 ...	CD45 PerC...	CD45 ...
Matrix List								
DefaultMatrix								
CD3 FITC-H	100	0	5.5	0	0	0	0	
CD3 FITC-A	0	-100	0	0	0	0	0	
CD16+56 ...	6.49	0	-100	0	75.79	0	0	
CD16+56 ...	0	0	0	-100	0	0	0	
CD45 PerC...	1.5	0	4	0	-100	0	0	
CD45 PerC...	0	0	0	0	0	0	100	
CD4 PE-Cy...	0	0	0.5	0	21.29	0	0	
CD4 PE-Cy...	0	0	0	0	0	0	0	

Compensation Matrix List: 1 FCS data can set over 10 compensation matrix datas

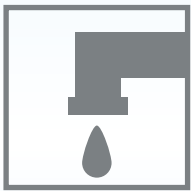


**Save**

4 minutes after the instrument is turned on, the samples can be analyzed, and the samples can be loaded automatically to ease the human labor.

Switching on/off process is simple. The sample volume required for analysis is small, and the loss volume of sheath fluid is limited, too.

Automated liquid path maintenance can simplify routine maintenance process and reduce maintenance costs. The instrument has high reliability. (Shown as below)



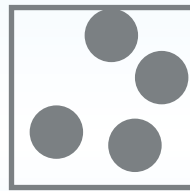
Cleaning



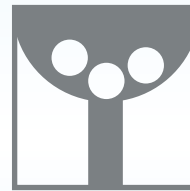
Extensive Rinse



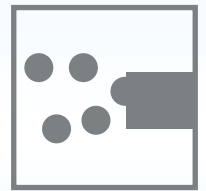
Unclog



Debubble



Priming



Backflush



**Satisfied**



### Training Center

Professional training center with professional training lecturer team, to provide professional training services of application support and hardware maintenance support.



### Customer Service Center

All-round clock service, quick response within 24 hours.



### Professional Service System

Strong application support and maintenance service team, and perfect service response system would respond to your needs quickly.



### Proactive Care

Application support and maintenance service team revisit regularly to ensure the stability of the instrument, and the clinical sample be analyzed efficiently. Communicate thoroughly with customers and collect product optimization suggestions.



### Frontier Information

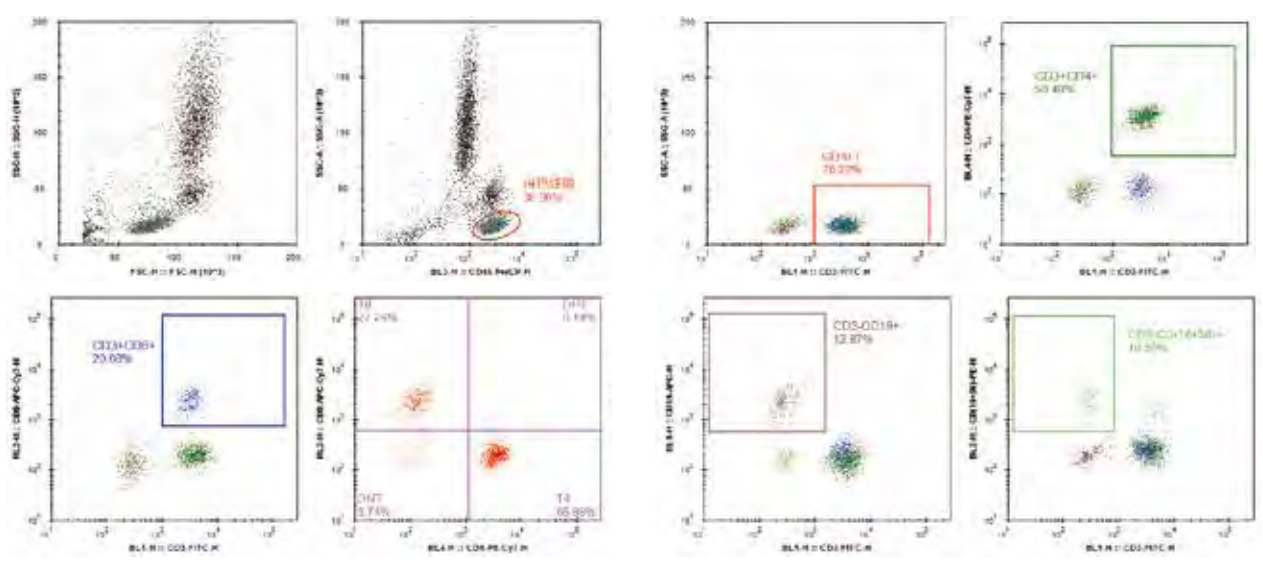
Professional medical team to share the state of art information about the flow cytometer through official wechat account regularly.



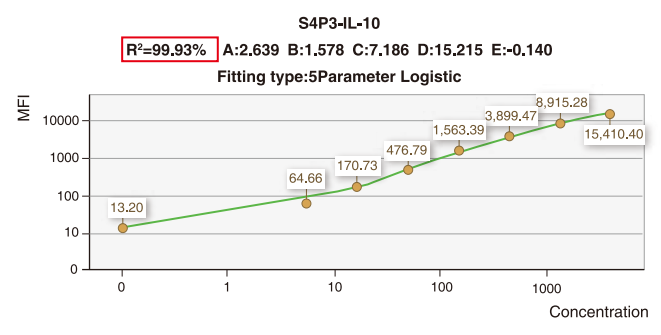
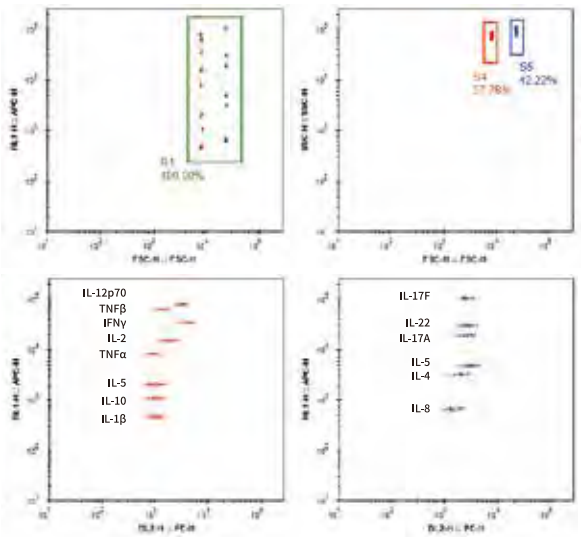
# BeamCyte™ Flow Cytometer meets the needs of daily clinical analysis and translational medicine analysis



- Immune function monitoring of lymphocyte subsets
- Absolute count of CD4+T Lymphocytes
- Cytokine Analysis
- Minimal Residual Disease (MRD)
- Immune phenotype of Leukemia & lymphoma
- Paroxysmal Nocturnal Hemoglobinuria (PNH)
- Hematopoietic Stem Cell (HSC)
- Myelodysplastic Syndromes(MDS)
- nCD64 index
- HLA-B27 Analysis
- Platelet-associated antibody
- Reproduction-related analysis



Lymphocyte subsets Analysis



Cytokine Analysis

# BeamCyte™ 1026 Technical Parameters

Item	Parameters
	Semiconductor laser (488nm、638nm) 6 Fluorescence channels
Laser, Power	488 nm laser , standard configuration 20mW , optional Configuration 40/60mW 638 nm laser , standard configuration 20mW , optional Configuration 40/60mW
Filters configuration	488nm laser: 530/30 nm BP FITC, 585/42 nm BP PE, 700 BP PerCP/ PE-Cy 5, 785/55 nm BP PE-Cy7 638nm laser: 660/20 nm BP APC, 785/55 nm BP APC-Cy7;
Optics	The excitation and receiving of solid spatial separation.No fiber conduction. Fixed optical path.
Sensitivity of fluorescence	FITC < 75 MESF; PE < 55 MESF; APC < 55 MESF
FSC sensitivity	0.5 μm
SSC sensitivity	0.2 μm
Range of particles	0.2-60 μm
Linear	≥ 0.98
Resolution	CV ≤2%
Carry-over	≤ 0.1%
Detector	Avalanche Photodiode Detector(APD)
Speed	45,000 events/s; 96 - well plates/30min
Minimum sample volume	10μL
Speed of sample	15 ~ 235 μL/Min
Absolute count	Volumetric method; Microspheres method;
Preheating time	<4min
Blending mode	Whole plate;single pipe;interval mixing is set freely;
Tube numbers of leader	40tubes and 96 holes
Type of tube	Standard flow pipe (12x75mm, 5ml) , 96 - well plates(F,U,V type), Centrifugal tube (1.5ml, 2ml)
Capacity of Liquid bottle	Waste liquid barrel 6L,Sheath liquid drum 6L,Cleaning liquid drum 1L;
Maintenance system	Liquid path maintenance automation
Software	The software has the edition in English and Chinese. With the function of automatic quality control detection, software can draw Levey-Jennings curve automatically. Support to be connected with clinical LIS software, to facilitate data graphic transmission.
Feature of software	Automatic saving mode against power failure; Detection and analysis can run at the same time.
Compensation	Compensation Matrix List; Quick Compensation ; Auto Compensation Calculation; Auto Compensation;
FCS format	FCS 3.0
Volume	The host system: 44 x 43.5 x 52 cm(W x D x H cm); The host system with leader: 57.2 x 53.3 x 52 cm(W x D x H cm); Liquid tray: 44 x 32 x 45 cm(W x D x H cm);
Weight	The host system: 32 Kg;The host system with leader: 38 Kg;Liquid tray: 7 Kg;
Operational environment	10 - 35°C, 15-80 % RH
Voltage	220 V~,50Hz
Computer operating system	Win10 pro

Inspiring & Enabling Life Science Innovation



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