

LT Biotech

Chromatography Resin Catalogue

Size-exclusion Chromatography

Size-exclusion chromatography (SEC), also known as molecular sieve chromatography, is a chromatographic method in which molecules in solution are separated by their size, and in some cases molecular weight. LT Biotech offers a product line for SEC chromatography.

NN	Name	Matrix	PSD, μm	Separation range, kDa	Swelling coefficient	Product code
1	Persefose 4FF	Agarose	45-165	60-20,000	ND	701
2	Persefose 6FF	Agarose	45-165	10-4,000	ND	702
3	Persefose CL-4B	Agarose	45-165	60-20,000	ND	703
4	Persefose CL-6B	Agarose	45-165	10-4,000	ND	704
5	Persefose 4B	Agarose	45-165	60-20,000	ND	291
6	Persefose 6B	Agarose	45-165	10-4,000	ND	706
7	SP-dex 30 PG	Agarose and Dextran	22-44	1-10	ND	791
8	SP-dex 75 PG	Agarose and Dextran	22-44	3-70	ND	792
9	SP-dex 200 PG	Agarose and Dextran	22-44	10-600	ND	793
10	Persedex G-25C	Dextran	100-300	1-5	4-5 ml/g	172
11	Persedex G-25M	Dextran	50-150	1-5	4-5 ml/g	573
12	Persedex G-25F	Dextran	20-80	1-5	4-5 ml/g	574
13	Persedex G-25SF	Dextran	20-50	1-5	4-5 ml/g	175
14	Persedex G-50M	Dextran	50-150	1-30	9-10 ml/g	293
15	Persedex G-50F	Dextran	20-80	1-30	9-10 ml/g	576
16	Persedex G-50SF	Dextran	10-40	1.5-30	9-11 ml/g	292
17	Persedex LH-20	Dextran	20-120	4-5	1.9-2.3 ml/g	578
18	Persecryl 100	*	25-75	1-100	ND	201
19	Persecryl 200	*	25-75	5-250	ND	200

* copolymer of acrylic anhydride and N-N methylenebissulfamide
 4FF; CL-4B; 4B - linking ratio 4 %
 6FF; CL-6B; 6B - linking ratio 6 %
 PSD: particle size distribution

Product line features:

Persefose FF, CL

- Chromatography resins based on agarose matrix.
- Weak non-specific adsorption, organic solvent resistance and good chemical stability.
- Suitable for the separation of polysaccharides, recombinant proteins, nucleic acids and other biomolecules, or determination of QC molecular weight.

SP-dex PG

- Chromatography resin based on an improved agarose matrix.
- Weak non-specific adsorption and good chemical stability.
- Suitable for the separation of various biomolecules, including polypeptides, polysaccharides, re-combinant proteins, nucleic acids and viruses.

Persedex G

- Chromatography resin based on a cross-linked dextran matrix
- Organic solvent resistance and good chemical stability
- Suitable for desalting of various biomolecules, buffer replacement, separation and purification of small molecular substances, such as peptides.

Persedex LH-20

- Chromatography resin based on a hydroxypropylated dextran matrix.
- Substituted by hydroxypropyl, suitable for aqueous or organic phase, with good chemical stability.
- Suitable for the separation of natural products and other substances with small differences.

Persecryl

- Chromatography resin based on a copolymer of acrylic anhydride and N-N methylenebissulfamide.
- Suitable for the separation and purification of -interferon, interleukin-II, protein A and hepatitis B vaccine.

Ordering information

LT Biotech SEC resins can be supplied in 25 ml, 100 ml, 500 ml, 1L, 5L, 10L and 20 L plastic bottles or tins, and can be prepacked into 1 ml, 4.7 ml and 5 ml columns, suitable for the ÄKTA™ system. The catalogue number consists of eight digits, in the format XXX-ZZZZZ. XXX is the product code and ZZZZZ is the pack size in ml. For example, 701-00025 is a 25-ml bottle of Persefose 4FF, and 200-10000 is a 10 L tin of Persecryl 200. For detailed information on pack types and quantities please contact your local distributor or refer to the product list.

Ion-exchange Chromatography

Ion-exchange chromatography (IEX) separates ion and polar molecules based on their affinity to the ion exchanger. LT Biotech offers a wide product line for IEX chromatography:

NN	Name	Matrix	Function	d50, µm	Dynamic binding capacity	Product code
20	Lepta Q	Agarose	SAX	90	≥100 mg BSA/ml	601
21	Lepta Q HR	Agarose	SAX	40	≥60 mg BSA/ml	602
22	Q Persefose FF	Agarose	SAX	90	≥50 mg BSA/ml	711
23	Q Persefose HP	Agarose	SAX	34	≥90 mg BSA/ml	712
24	Q Persefose XL	Agarose	SAX	90	≥160 mg BSA/ml	714
25	Q Persefose BB	Agarose	SAX	200	≥90 mg BSA/ml	713
26	Lepta DEAE	Agarose	WAX	90	≥90 mg ovalbumin/ml	604
27	Lepta DEAE HR	Agarose	WAX	40	≥90 mg ovalbumin/ml	294
28	DEAE Persefose FF	Agarose	WAX	90	≥90 mg ovalbumin/ml	716
29	DEAE Persefose HP	Agarose	WAX	34	≥90 mg ovalbumin/ml	717
30	DEAE Persefose XL	Agarose	WAX	90	≥80mg BSA /ml	298
31	DEAE Persefose BB	Agarose	WAX	200	≥50mg BSA/ml	296
32	Lepta S	Agarose	SCX	90	≥60 mg p-lactoglobulin/ml	605
33	Lepta SP HR	Agarose	SCX	40	≥90 mg lysozyme/ml	606
34	SP Persefose FF	Agarose	SCX	90	≥90 mg lysozyme/ml	718
35	SP Persefose HP	Agarose	SCX	34	≥90 mg lysozyme/ml	719
36	SP Persefose XL	Agarose	SCX	90	≥160 mg lysozyme/ml	721
37	SP Persefose BB	Agarose	SCX	200	≥90mg lysozyme/ml	720
38	CM Persefose FF	Agarose	WCX	90	≥50 mg lysozyme/ml	723
39	CM Persefose XL	Agarose	WCX	90	≥85 mg lysozyme/ml	299
40	CM Persefose BB	Agarose	WCX	200	≥60mg lysozyme/ml	297
41	Q Persedex A-25	Dextran	SAX	80	≥140 mg α-lactalbumin/ml	265

NN	Name	Matrix	Function	d50, µm	Dynamic binding capacity	Product code
42	Q Persedex A-50	Dextran	SAX	80	≥80 mg albumin/ml	266
43	DEAE Persedex A-25	Dextran	WAX	80	≥140 mg α-lactalbumin/ml	261
44	DEAE Persedex A-50	Dextran	WAX	80	≥140 mg albumin/ml	262
45	SP Persedex C-25	Dextran	SCX	80	≥230 mg ribonuclease/ml	267
46	SP Persedex C-50	Dextran	SCX	80	≥100 mg ribonuclease/ml	268
47	CM Persedex C-25	Dextran	WCX	80	≥190 mg ribonuclease/ml	263
48	CM Persedex C-50	Dextran	WCX	80	≥120 mg lysozyme/ml	264
49	Helios Q 15	PS/DVB*	SAX	15	≥45 mg BSA/ml	111
50	Helios S 15	PS/DVB*	SCX	15	≥80 mg lysozyme/ml	112
51	Helios Q 30	PS/DVB*	SAX	30	≥45 mg BSA/ml	113
52	Helios S 30	PS/DVB*	SCX	30	≥80 mg lysozyme/ml	114
53	Helios 50-HS	PS/DVB*	SCX	50	≥50mg lysozyme/ml	801
54	Helios 50-XS	PS/DVB*	SCX	50	≥102 mg human IgG/ml	205
55	Helios 50-HQ	PS/DVB*	SAX	50	≥70 mg BSA/ml	206
56	Helios 50-Q	PS/DVB*	SAX	50	≥140 mg BSA/ml	207
57	Aether Q	PMMA**	SAX	80	≥110 mg BSA/ml	232
58	Aether S	PMMA**	SCX	80	≥130 mg lysozyme/ml	231
59	Aether Q-650	PMMA**	SAX	80	≥95 mg BSA/ml	226
60	Aether DEAE-650	PMMA**	WAX	80	≥90 mg BSA/ml	225
61	Aether S-650	PMMA**	SCX	80	≥110 mg lysozyme/ml	228
62	Aether CM-650	PMMA**	WCX	80	≥105 mg lysozyme/ml	227

Key:
d50: mean or average particle size
PS/DVB*: Polystyrene-divinylbenzene
PMMA**: Polymethylmethacrylate
SAX: strong anion exchange
WAX: weak anion exchange
SCX: strong cation exchange
WCX: weak cation exchange
S: -SO₃H
CM: -COOH
Q: -CH₂N⁺(CH₃)₃Cl⁻
DEAE: -CH₂CH₂N⁺H(CH₂CH₃)₂Cl⁻



Product line features:

Lepta

- Chromatography resin based on a highly cross-linked agarose matrix.
- High-flow velocity, low back pressure and high binding capacity, good chemical stability and solvent resistance.
- Suitable for the separation and purification of recombinant proteins, antibodies, nucleic acids, viruses and virus-like particles and polysaccharides.

Lepta HR

- Chromatography resin based on an improved agarose matrix.
- Weak non-specific adsorption and good chemical stability.
- Suitable for the separation of various biomolecules, including polypeptides, polysaccharides, re-combinant proteins, nucleic acids and viruses.

Persefose BB

- Large-particle-size chromatography resin based on an agarose-based matrix.
- With organic solvent resistance and good chemical stability.
- Suitable for separation with large molecules, high impurity content or large sample volume.

Persefose FF

- High-flow velocity chromatography resin based on an agarose-based matrix.
- With weak non-specific adsorption and good chemical stability.
- Used for the separation and purification of recombinant proteins, antibodies, nucleic acids, viruses and virus-like particles, and polysaccharides.

Persefose HP

- High-resolution chromatography resin based on an agarose-based matrix.
- With weak non-specific adsorption and good chemical stability.
- Suitable for fine separation and purification of recombinant proteins, antibodies, nucleic acids, viruses and virus-like particles and polysaccharides.

Persefose XL

- Chromatography resin based on an agarose-based matrix with ultra-high binding capacity.
- With organic solvent resistance and good chemical stability.
- Suitable for separation and purification of recombinant proteins, antibodies, nucleic acids, viruses and virus-like particles, and polysaccharides.

Persedex A

- Chromatography resin on a dextran-based matrix.
- Used in for purification of proteins, nucleic acids and peptides.

Persedex C

- Chromatography resin on a dextran-based matrix.
- Used separation of low molecular weight proteins, peptides, nucleotides and macromolecules.

Helios

- Chromatography resin series with polystyrene-divinylbenzene (PS/DVB) matrix.
- Widely used in the capture, intermediate purification and fine purification of antibodies, proteins, peptides, nucleic acids, vaccines, blood products and viruses.

Aether

- Chromatography resin series with Polymethylmethacrylate matrix.
- Widely used in the capture, intermediate purification and fine purification of antibodies, proteins, peptides, nucleic acids (oligonucleotides), viruses, insulins and other biomolecules.

Ordering information

LT Biotech IEX resins can be supplied in 25 ml, 100 ml, 500 ml, 1L, 5L, 10L and 20 L plastic bottles or tins, and can be prepacked into 1 ml, 4.7 ml and 5 ml columns, suitable for the ÄKTA™ system. The catalogue number consists of eight digits, in the format XXX-ZZZZZ. XXX is the product code and ZZZZZ is the pack size in ml. For example, 601-00025 is a 25-ml bottle of Lepta Q resin, and 801-10000 is a 10 L tin of Helios 50-HS. For detailed information on pack types and quantities please contact your local distributor or refer to the product list.

Affinity Chromatography

Affinity chromatography (AC) is a method of separating abio molecule from a mixture, based on a highly specific macromolecular binding interaction between the bio molecule and another substance. LT Biotech provide vast product range of affinity chromatography resins:

NN	Name	Matrix	Functional group	d50, μm	Dynamic binding capacity / ligand density	Product code
Antibody purification						
63	Lepta SuRe LX	Agarose	AR rProtein A	85	≥60 mg human IgG/ml	651
64	Lepta ProtA LX	Agarose	AR rProtein A	75	≥65 mg human IgG/ml	150
65	Lepta SuperA	Agarose	AR rProtein A	60	≥75 mg human IgG/ml	151
66	Lepta rProtein A	Agarose	AR rProtein A	85	≥60 mg human IgG/ml	652
67	rProtein A Persefose FF	Agarose	AR rProtein A	90	≥60 mg human IgG/ml	727
68	Persefose 4FF Protein G	Agarose	Protein G	90	≥20 mg human IgG/ml	126
Histidine-tagged proteins purification						
69	Ni Persefose FF	Agarose	NTA-Ni ²⁺	90	≥40mg His-tagged protein/ml	751
70	Ni Persefose HP	Agarose	NTA-Ni ²⁺	34	≥40mg His-tagged protein/ml	752
71	Ni Persefose Excel	Agarose	NTA-Ni ²⁺	90	≥10mg His-tagged protein/ml	755
IMAC purification						
72	IMAC Persefose FF	Agarose		90	≥40 mg His-tagged protein/ ml when Ni2+ is added	753
73	IMAC Persefose HP	Agarose		34		155
Metal chelating affinity						
74	Chelating Persefose FF	Agarose	Iminodiacetic acid	90	≥30-37 μmol Cu ₂₊ /ml	754
75	Aether chelate (IDA)	PMA*	Aminotriacetate	80	≥60-100 μmol Cu ₂₊ /ml	241
76	Aether chelate (NTA)	PMA*	Iminodiacetic acid	80	≥60-100 μmol Cu ₂₊ /ml	242
GST-tagged proteins purification						
77	Glutathione Persefose 4FF	Agarose	Glutathione	90	≥10 mg GST-tagged protein/ml	742
78	Glutathione Persefose 4B	Agarose	Glutathione	90	≥5 mg GST-tagged protein/ml	154

NN	Name	Matrix	Functional group	d50, µm	Dynamic binding capacity / ligand density	Product code
mRNA purification						
79	Oligo dT	Polystyrene	dT-20mer***	50	≥2mg mRNA /ml	252
Heparin affinity						
80	Heparin Persefose FF	Agarose	Porcine heparin	90	≥2mg ATIII /ml	761
81	Heparin Persefose HP	Agarose	Porcine heparin	34	≥2mg ATIII /ml	162
Plasmid DNA purification						
82	Lepta PlasmidCap HR	Agarose	2-mercaptopyridine	40	≥3.0 mg/ml	681
83	PlasmidCap Persefose HP	Agarose		34	≥2.0 mg/ml	181
Benzamidine affinity						
84	Benzamidine Persefose 4FF	Agarose	p-aminobenzamidine	90	≥35 mg trypsin/ml	741
Cibacron blue affinity						
85	Blue Persefose FF	Agarose	Cibacron Blue	90	≥18 mg HSA/ml	163
86	Blue Persefose HP	Agarose	Cibacron Blue	34	≥20 mg HSA/ml	164
87	Lepta Blue	Agarose	Cibacron Blue	75	≥24mg HSA/ml	158
88	Lepta Blue HS	Agarose	Cibacron Blue	40	≥24mg HSA/ml	159
Affinity Activated coupling						
89	CNBr activated Persefose 4FF	Agarose	CNBr****	90	≥12 mg HSA/ml	420
90	CNBr activated Persefose 4B	Agarose	CNBr****	90	≥12 mg HSA/ml	421
91	NHS activated Persefose 4FF	Agarose	NHS*****	90	16-23 NHS µmol/ml	422
92	NHS activated Persefose 4B	Agarose	NHS*****	90	16-23 NHS µmol/ml	423
93	Epoxy activated Persefose 4FF	Agarose	Epoxy	90	-	401

Key:

d50: mean or average particle size

PMA*: polymethacrylate

20mer***: 2-mercaptopyridine

CNBr****: cyanogen bromide

NHS*****: n-hydroxysuccinimide



Product line features:

Antibody purification

- With wide pH range resistance and good chemical stability.
- Optional Protein A or Protein G ligand.

Histidine-tagged proteins purification

- With good tolerance and chemical stability.
- Used for the purification of histidine-tagged proteins.

IMAC Persefose

- With excellent rigidity, high-flow velocity and optional metal ions for chelation.
- Used for purification of native and histidine-tagged recombinant proteins.

Chelating Persefose

- Metal ion chelating affinity chromatography resin made by covalently cross-linking iminodiacetic acid (IDA).
- Resin utilises the interaction between transition metal ions and histidine, cysteine and tryptophan, which are widely present in proteins.

Aether chelate

- Good hydrophilicity, high loading capacity, high resolution and non-toxic, small adsorption.
- Used in the separation and purification of polypeptides, proteins, nucleotides, phosphorylated proteins and recombinant proteins with His-tags that can be adsorbed by metal ions.

GST-tagged proteins purification

- Resin designed for the purification of glutathione S-transferase (GST)-tagged proteins, and other S-transferases or glutathione-dependent proteins.
- With good tolerance and chemical stability, high capacity, easy regeneration and easy amplification.

Oligo dT

- Based on polystyrene; the surface is covered with a large number of hydroxyl groups.
- The functionalised poly(dt) group can efficiently capture mRNA.
- High selectivity, extremely low non-specific adsorption, can withstand high temperature (65°C).

Heparin affinity

- Chromatography resin, made by covalently coupling heparin to an agarose matrix.
- Resin can be used to separate and purify coagulation factors, antithrombin III, growth factors, interferon, lipoprotein lipase, nucleic acid and steroid receptor enzymes.

Plasmid DNA

- Thiophilic affinity resin for separation of supercoiled plasmid DNA based on highly cross-linked agarose matrix.
- High resolution and good chemical stability.

Benzamidine affinity

- Chromatography resin based on agarose matrix with p-aminobenzamidine coupling.
- Especially suitable for separation and purification or removal of trypsin, serine protease, urokinase and kallikrein.

Cibacron Blue affinity

- Chromatography resin based on highly cross-linked agarose matrix with covalently linking Cibacron Blue.
- Used for separation and purification of various proteins, such as albumin, lipoprotein, interferon, coagulation factors and related proteins.
- Blue Persefose HP can also be used for separation and purification of various nucleotide-dependent enzymes, and 2-macroglobulin.

CNBr activated Persefose

- A pre-activated affinity chromatography resin for separation and purification through specific interactions between biomolecules.
- A chromatography resin used for coupling high molecular weight ligands containing amino groups.
- Multi-point binding prevents the ligands from falling off.

NHS activated Persefose

- A pre-activated affinity chromatography resin for separation and purification through specific interactions between biomolecules.
- A chromatography resin used for coupling small molecular proteins or peptides.
- Multi-point binding prevents the ligands from falling off.

Epoxy-activated Persefose

- Epoxy-activated affinity chromatography resin with agarose base, which can be coupled through hydroxyl, amino or sulfhydryl groups on the ligand to form a specific affinity chromatography resin.
- Resin has a long hydrophilic spacer, which is especially suitable for coupling small molecule ligands.

Ordering information

LT Biotech AC resins can be supplied in 25 ml, 100 ml, 500 ml, 1L, 5 L, 10 L and 20 L plastic bottles or tins, and can be prepacked into 1 ml, 4.7 ml and 5 ml columns, suitable for the ÄKTA™ system. The catalogue number consists of eight digits, in the format XXX-ZZZZZ. XXX is the product code and ZZZZZ is the pack size in ml. For example, 651-00025 is a 25-ml bottle of Lepta SuRe LX resin, and 681-10000 is a 10 L tin of Lepta PlasmidCap HR. For detailed information on pack types and quantities please contact your local distributor or refer to the product list.

Hydrophobic Interaction Chromatography

Hydrophobic interaction chromatography (HIC) separates proteins according to differences in their surface hydrophobicity. Multimodal (MM) or mixed-mode chromatography (MMC) is a liquid chromatography technique used for the purification of proteins and other biomolecules that are difficult to separate by other chromatography methods. LT Biotech provides a product line for HIC and MMC, based on the agarose matrix.

NN	Name	Functional group	Ligand density	d50*, µm	Hydrophobicity	Product code
94	Lepta Phenyl (HS)	Phenyl	~22 µmol/ml	75	Ultrastrong	631
95	Lepta Phenyl (LS)	Phenyl	~15 µmol/ml	75	Strong	135
96	Lepta Phenyl HR	Phenyl	~9 µmol/ml	40	Ultra strong	632
97	Phenyl Persefose 6FF (HS)	Phenyl	~45 µmol/ml	90	Ultrastrong	731
98	Phenyl Persefose 6FF (LS)	Phenyl	~25 µmol/ml	90	Strong	732
99	Phenyl Persefose HP	Phenyl	~25 µmol/ml	34	Ultrastrong	730
100	Lepta Butyl	Butyl	~53 µmol/ml	80	Weak	133
101	Lepta Butyl HR	Butyl	~20 µmol/ml	40	Weak	634
102	Butyl Persefose 4FF	Butyl	~40 µmol/ml	90	Weak	734
103	Butyl-S Persefose 6FF	Butyl-S	~10 µmol/ml	90	Ultra weak	735
104	Butyl Persefose HP	Butyl	~50 µmol/ml	34	Weak	136
105	Lepta Octyl	Octyl	~5 µmol/ml	80	Strong	134
106	Octyl Persefose 4FF	Octyl	~5 µmol/ml	90	Strong	137

d50*: mean or average particle size

Product line features:

Lepta HIC

- High-flow velocity chromatography resin based on an improved agarose matrix.
- Excellent rigidity, high-flow velocity, low back pressure and easy to scale up.
- Resistant to high-concentration salt, a wide pH range and organic solvents, and with good chemical stability.
- Used for the separation and purification of various biomolecules such as recombinant proteins, plasmids, viruses and virus-like particles.

Lepta HR HIC

- High-resolution chromatography resin based on an improved agarose-based matrix.
- Has both high resolution and high-flow velocity.
- Resistant to high-concentration salt, a wide pH range and organic solvents, and with good chemical stability.

Persefose HIC FF

- Chromatography resin based on an improved agarose-based matrix.
- Resistance to high-concentration salt, a wide pH range and organic solvents, and with good chemical stability.
- Used for the separation and purification of various biological molecules such as recombinant proteins, plasmids, viruses and virus-like particles.

Persefose HIC HP

- Chromatography resin based on an improved agarose-based matrix, uses the difference in the nature and amount of hydrophobicity of different molecules under specific conditions to separate them.
- Resistance to high-concentration salt, a wide pH range and organic solvents, and with good chemical stability.
- Used for the separation and purification of various biological molecules, such as recombinant proteins, antibodies and virus vaccines.

Persecryl

- Chromatography resin based on a copolymer of acrylic anhydride and N-N methylenebisulfamide.
- Suitable for the separation and purification of -interferon, interleukin-II, protein A and hepatitis B vaccine.

Ordering information

LT Biotech HIC resins can be supplied in 25 ml, 100 ml, 500 ml, 1L, 5 L, 10 L and 20 L plastic bottles or tins, and can be prepacked into 1 ml, 4.7 ml and 5 ml columns, suitable for the ÄKTA™ system. The catalogue number consists of eight digits, in the format XXX-ZZZZZ. XXX is the product code and ZZZZZ is the pack size in ml. For example, 632-00025 is a 25-ml bottle of Lepta Phenyl HR resin, and 133-10000 is a 10 L tin of Lepta Butyl. For detailed information on pack types and quantities please contact your local distributor or refer to the product list.

Multimodal Chromatography

Mixed-mode chromatography (MMC), or multimodal chromatography, refers to chromatographic methods that separates solutes by using a stationary phase that involves in the separation two or more types of interactions. Based on a highly rigid agarose base matrix it contributes affinity-like binding and selectivity. LT Biotech offers a product line for MMC chromatography.

NN	Functional group	Ligand density	d ₅₀ [*] , μm	Hydrophobicity	Product code
107	Lepta MMC	Carboxyl groups, hydrogen bonds and hydrophobic groups	75	≥45 mg BSA/ml	610
108	Lepta MMC HR		40	≥45 mg BSA/ml	611
109	Lepta MMA	Amino groups, hydrogen bonds and hydrophobic groups	75	≥30 mg BSA/ml	612
110	Lepta MMA HR		40	≥30 mg BSA/ml	613
111	Lepta 400	N/A	90	≥22 mg ovalbumin/ml	624
112	Lepta 700	N/A	90	≥10 mg BSA/ml	627

d₅₀^{*}: mean or average particle size

Product line features:

Lepta MMC

- High-flow velocity chromatography resin based on an improved agarose-based matrix.
- Wide range resistance and good chemical stability.
- Strong binding force, high binding capacity under high-salt conditions.
- Composed of multiple groups with different properties: carboxyl groups, hydrogen bonds and hydrophobic groups.

Lepta MMA

- High-flow velocity chromatography resin based on an improved agarose-based matrix.
- Wide range resistance and good chemical stability.
- Composed of multiple groups with different properties: amino groups, hydrogen bonds and hydrophobic groups.
- Can remove major impurities such as nucleic acid, host protein, aggregates and viruses, and is widely used in the fields of polysaccharides, antibodies, viral vectors or vaccines.

Lepta 700/400

- Double-layer structure, where the outer shell is an improved agarose-based passivation layer and the inner core is a ligand of both hydrophobic and ionic functions.
- Wide range resistance and good chemical stability.
- Suitable for the separation of viruses and other large bio molecules.

Ordering information

LT Biotech MMC resins can be supplied in 25 ml, 100 ml, 500 ml, 1L, 5 L, 10 L and 20 L plastic bottles or tins, and can be prepacked into 1ml, 4.7 ml, and 5 ml columns, suitable for the ÄKTA™ system. The catalogue number consists of eight digits, in the format XXX-ZZZZZ. XXX is the product code and ZZZZZ is the pack size in ml. For example, 610-00025 is a 25-ml bottle of Lepta MMC resin, and 624-10000 is a 10 L tin of Lepta 400. For detailed information on pack types and quantities please contact your local distributor or refer to the product list.

Hydroxyapatite

Ceramic hydroxyapatite (CHT) – $(\text{Ca}_5(\text{PO}_4)_3\text{OH})_2$ – is a form of calcium phosphate used in chromatographic separation. LT Biotech provides two types of CHT, Type I and Type II.

NN	Name	Matrix	Functional group	d50,µm	Dynamic binding capacity	Product code
113	Pleiad CHT Type I	Hydroxyapatite	$\text{Ca}_2^+ \text{PO}_4^{3-} \text{OH}$	20	≥25-60 mg mAb/ml	800
114	Pleiad CHT Type I	Hydroxyapatite	$\text{Ca}_2^+ \text{PO}_4^{3-} \text{OH}$	40	≥25-60 mg mAb/ml	802
115	Pleiad CHT Type I	Hydroxyapatite	$\text{Ca}_2^+ \text{PO}_4^{3-} \text{OH}$	60	≥25-60 mg mAb/ml	803
116	Pleiad CHT Type I	Hydroxyapatite	$\text{Ca}_2^+ \text{PO}_4^{3-} \text{OH}$	80	≥25-60 mg mAb/ml	804
117	Pleiad CHT Type II	Hydroxyapatite	$\text{Ca}_2^+ \text{PO}_4^{3-} \text{OH}$	20	≥15-25 mg mAb/ml	805
118	Pleiad CHT Type II	Hydroxyapatite	$\text{Ca}_2^+ \text{PO}_4^{3-} \text{OH}$	40	≥15-25 mg mAb/ml	806
119	Pleiad CHT Type II	Hydroxyapatite	$\text{Ca}_2^+ \text{PO}_4^{3-} \text{OH}$	60	≥15-25 mg mAb/ml	807
120	Pleiad CHT Type II	Hydroxyapatite	$\text{Ca}_2^+ \text{PO}_4^{3-} \text{OH}$	80	≥15-25 mg mAb/ml	808

Product line features:

Pleiad CHT

- Inorganic pure-phase chromatography resin with a stable structure
- Supporting multiple separation modes including cation exchange, calcium affinity and separation by hydroxyl groups.

Ordering information

LT Biotech CHT can be supplied in 10 g, 25 g, 100 g, 1 kg and 5 kg packs. The catalogue number consists of eight digits, in the format XXX-ZZZZZ. XXX is the product code and ZZZZZ is the pack size in ml. For example, 800-00025 is a 25 grampack of Pleiad CHT Type I 20 µm, and 806-50000 is a 5 kg tin of Pleiad CHT Type II 40 µm. For detailed information on pack types and quantities please contact your local distributor or refer to the product list.

Reverse Phase Chromatography

Reversed-phase chromatography (RPC) is used for separating compounds that have hydrophobic moieties and do not have a dominant polar character. LT Biotech provide a product line for RPC.

NN	Name	Matrix	D50/PSD, (µm)	Pore size (Å)	Dynamic binding capacity	Product code
121	Corus 10-100	PS/DVB*	10	100	≥32-40 mg B12/ml ≥30-60 mg insulin/ml	270
122	Corus 10-300	PS/DVB*	10	300		271
123	Corus 15-100	PS/DVB*	15	100		272
124	Corus 15-300	PS/DVB*	15	300		273
125	Corus 30-100	PS/DVB*	30	100		274
126	Corus 30-300	PS/DVB*	30	300		275
127	Amphirus 161-S	PS/DVB*	30-50	100	≥40 mg B12/ml ≥45 mg insulin/ml	276
128	Amphirus 161-M	PS/DVB*	50-75	100		277
129	Amphirus 161-L	PS/DVB*	75-150	100		278
130	Amphirus 71-S	PMMA**	30-50	300	≥6 mg B12/ml ≥28 mg insulin/ml	279
131	Amphirus 71-M	PMMA**	50-75	300		280
132	Amphirus 71-L	PMMA**	75-150	300		281
133	Demerus 20-S	PS/DVB*	30-50	300	≥32 mg B12/ml ≥28 mg insulin/ml	282
134	Demerus 20-M	PS/DVB*	50-75	300		283
135	Demerus 20-L	PS/DVB*	75-150	300		284
136	Demerus 20-S HP	PS/DVB*	30-50	300	≥42 mg B12/ml ≥70 mg insulin/ml	285
137	Demerus 20-M HP	PS/DVB*	50-75	300		286
138	Demerus 20-L HP	PS/DVB*	75-150	300		287

* Polystyrene-divinylbenzene

** Polymethacrylate

Product line features:

Corus

- Large specific surface area, excellent chemical, physical stability and other characteristics; narrow pH operating range, high flow rate and high dynamic capacity.
- Used for separation of small molecular compounds, peptides, low molecular weight proteins and other biomolecules.

Amphirus

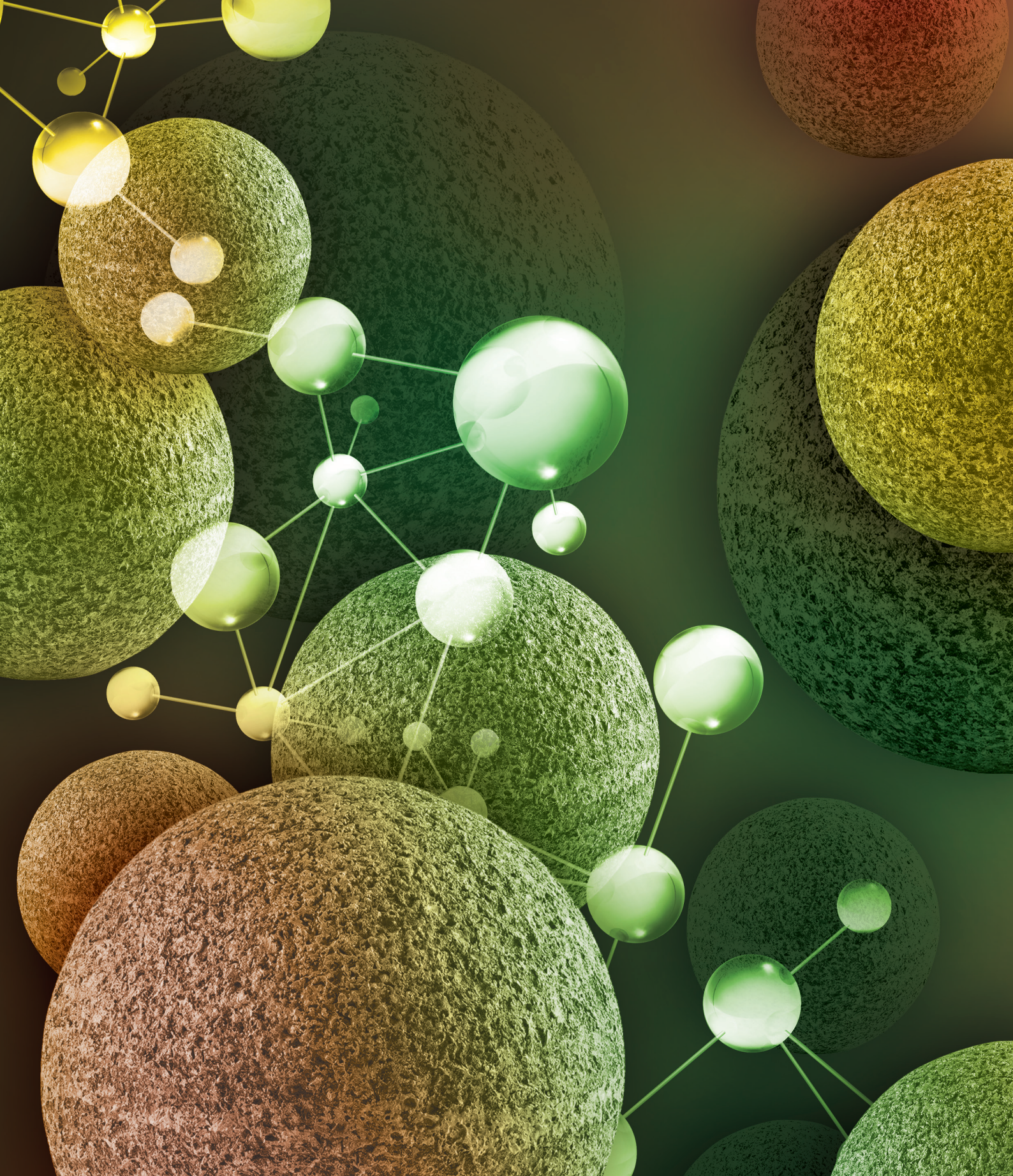
- High mechanical stability, high resolution and selectivity.
- Long resin lifetime and direct scale-up.
- Designed for use in capture and purification steps recombinant polypeptides, such as insulin.

Demerus

- Controlled pore size distribution and large surface area offer excellent resolution.
- Excellent balance of pressure flow characteristics and true chromatographic fractionation.
- Widely used for purification of small peptides, oligonucleotides, proteins, adsorption of vitamins, antibiotics, enzymes, steroids and other substances from fermentation solution, removal of phenol.

Ordering information

LT Biotech RPC resins can be supplied in 25 ml, 100 ml, 500 ml, 1L, 5 L and 10 L plastic bottles or tins. The catalogue number consists of eight digits, in the format XXX-ZZZZZ. XXX is the product code and ZZZZZ is the pack size in ml. For example, 270-00025 is a 25ml bottle of Circeon 10-100 resin, and 276-10000 is a 10 L of Amphirion 161-S. For detailed information on pack types and quantities please contact your local distributor or refer to the product list.



LT Biotech

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