



ChromaX[®] Chromatography Resin

Selection Guide



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Chromatography Application 45

Antibodies
 Plasmids
 Viral vectors
 Polysaccharide (-Protein Conjugate) Vaccines

Common names and abbreviations in this Selection Guide:

Names:

MaXtar®: High-rigidity chromatography resin based on an improved agarose-based matrix, with high flow velocity, high binding capacity, and low back pressure

Chromstar®: Chromatography resin based on an improved agarose-based matrix, with organic solvent resistance and good chemical stability

Puredex®: Chromatography resin based on a dextran-based matrix, with good chemical stability

Geldex®: High-resolution chromatography resin based on an improved agarose-based matrix, with weak non-specific adsorption and good chemical stability

Abbreviations:

PG: Prep grade

HR: High resolution

XL: Dextran surface extender on the matrix with high binding capacity

BB: Big Beads chromatography resin, with a mean particle size of 200 µm

FF: Fast flow, with a mean particle size of 90 µm

HP: High performance, with a mean particle size of 34 µm

HS: High sub, high degree of ligand substitution

LS: Low sub, low degree of ligand substitution

Puredex® G-25 (C, M, F, SF):

C: Coarse, with a range of particle sizes of 100–300 µm

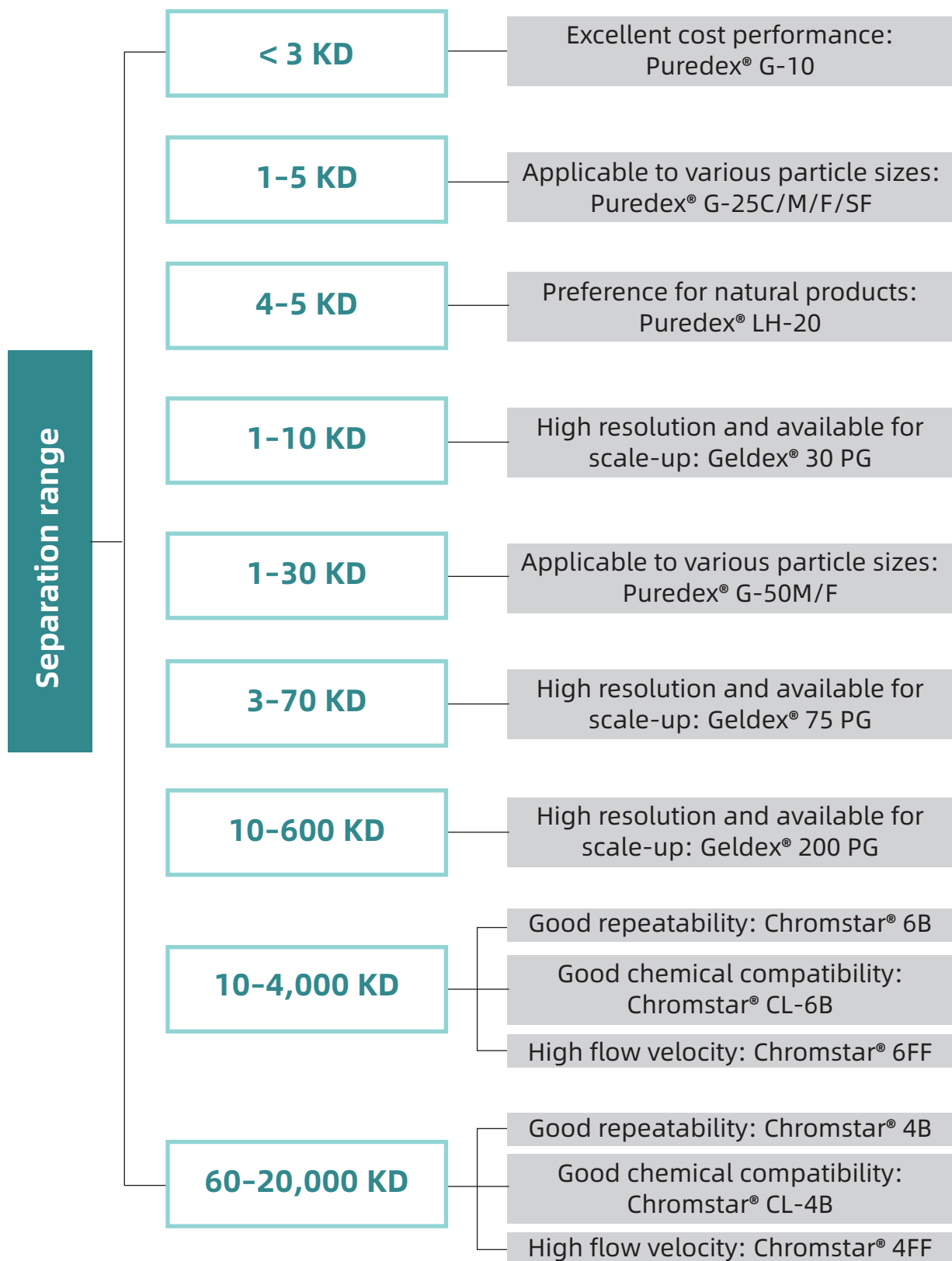
M: Medium, with a range of particle sizes of 50–150 µm

F: Fine, with a range of particle sizes of 20–80 µm

SF: Superfine, with a range of particle sizes of 20–50 µm

Note: The "maximum back pressure" in this Selection Guide refers to the back pressure of the chromatography resin, i.e., the test data obtained from the chromatographic column (inner diameter: 300 mm). The column hardware pressure limit of Chrom-Trap® and Chrom-Screen™ are both 0.5 MPa.

Size Exclusion Chromatography



Best Tool for Macromolecule Separation — Chromstar® 6FF

Chromstar® 6FF size exclusion chromatography resin is based on a highly cross-linked agarose-based matrix (6% cross-linking ratio), which can separate different molecules by the difference in molecular weight and molecular conformation. It is suitable for the separation and purification of various biomolecules, such as recombinant proteins, antibodies, nucleic acids, viruses, virus-like particles, and polysaccharides.

Chromstar® 6FF has excellent scale-up performance:

- The highly cross-linked agarose-based matrix has excellent rigidity. This helps not only to reduce the requirements on bed height but also to achieve high process flow velocity under low back pressure, improving process efficiency.
- The improved spherification process contributes to a smaller diffusion effect for better resolution.



Chromstar® FF

- High-flow velocity chromatography resin based on an agarose-based matrix
- With weak non-specific adsorption and good chemical stability
- Suitable for the separation of polysaccharides, recombinant proteins, viruses, and other large molecules

Product	Separation range of globulin (kD)	Range of particle sizes (µm)	Max. back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
Chromstar® 4FF	60-20,000	45-165	0.3	250	25 mL	1010-1121
					100 mL	1010-1122
					500 mL	1010-1123
					1 L	1010-1124
					5 L	1010-1125
					10 L	1010-1126
					20 L	1010-1127
Chromstar® 6FF	10-4,000	45-165	0.3	300	25 mL	1010-1131
					100 mL	1010-1132
					500 mL	1010-1133
					1 L	1010-1134
					5 L	1010-1135
					10 L	1010-1136
					20 L	1010-1137

Chromstar® CL

- Chromatography resin based on an improved agarose-based matrix
- With 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

Product	Separation range of globulin (kD)	Range of particle sizes (µm)	Max. back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
Chromstar® CL-4B	60-20,000	45-165	0.025	30	25 mL	1010-1151
					100 mL	1010-1152
					500 mL	1010-1153
					1 L	1010-1154
					5 L	1010-1155
					10 L	1010-1156
					20 L	1010-1157
Chromstar® CL-6B	10-4,000	45-165	0.045	30	25 mL	1010-1161
					100 mL	1010-1162
					500 mL	1010-1163
					1 L	1010-1164
					5 L	1010-1165
					10 L	1010-1166
					20 L	1010-1167

Chromstar®

- Chromatography resin based on an agarose-based matrix
- With organic solvent resistance and good chemical stability
- Suitable for the separation of polysaccharides, recombinant proteins, nucleic acids, and other large molecules

Product	Separation range of globulin (kD)	Range of particle sizes (µm)	Max. back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
Chromstar® 4B	60-20,000	45-165	0.018	15	25 mL	1010-1171
					100 mL	1010-1172
					500 mL	1010-1173
					1 L	1010-1174
					5 L	1010-1175
					10 L	1010-1176
					20 L	1010-1177
Chromstar® 6B	10-4,000	45-165	0.02	15	25 mL	1010-1181
					100 mL	1010-1182
					500 mL	1010-1183
					1 L	1010-1184
					5 L	1010-1185
					10 L	1010-1186
					20 L	1010-1187

Geldex® PG

- High-resolution chromatography resin based on an improved agarose-based matrix
- With weak non-specific adsorption and good chemical stability
- Suitable for the separation of various biomolecules, including polypeptides, polysaccharides, recombinant proteins, nucleic acids, viruses, etc.

Product	Separation range of globulin (kD)	Range of particle sizes (µm)	Max. back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
Geldex® 30 PG	1-10	22-44	0.3	100	100 mL	1050-6221
					500 mL	1050-6222
					1 L	1050-6223
					5 L	1050-6224
					10 L	1050-6225
Geldex® 75 PG	3-70	22-44	0.3	100	100 mL	1050-6321
					500 mL	1050-6322
					1 L	1050-6323
					5 L	1050-6324
					10 L	1050-6325
Geldex® 200 PG	10-600	22-44	0.3	100	100 mL	1050-6421
					500 mL	1050-6422
					1 L	1050-6423
					5 L	1050-6424
					10 L	1050-6425

Puredex®

- Chromatography resin based on a dextran-based matrix
- With organic solvent resistance and good chemical stability
- With various separation ranges and multiple particle sizes for component separation

Puredex® prepacked column

Product	Inner diameter × Column bed (mm)	Separation range of globulin (kD)	Range of particle sizes (µm)	Max.back pressure (MPa)	Recommended flow velocity (mL/min)	Quantity	Product code
Chrom-Trap® Puredex® G-25SF 5 mL	16/25	1-5	20-50	0.3	5	1 × 5 mL	2050-2123
Chrom-Trap® Puredex® G-25M 5 mL	16/25	1-5	50-150	0.3	5	1 × 5 mL	2050-2143

Puredex® chromatography resin

Product	Separation range of globulin (kD)	Range of particle sizes (µm)	Max.back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
Puredex® G-10	0-0.7	40-120	0.3	50	100 g	1050-2111
					500 g	1050-2112
					1 kg	1050-2113
					5 kg	1050-2114
Puredex® G-25C	1-5	100-300	0.3	500	100 g	1050-2151
					500 g	1050-2152
					1 kg	1050-2153
					5 kg	1050-2154
Puredex® G-25M	1-5	50-150	0.3	300	100 g	1050-2141
					500 g	1050-2142
					1 kg	1050-2143
					5 kg	1050-2144
Puredex® G-25F	1-5	20-80	0.3	150	100 g	1050-2131
					500 g	1050-2132
					1 kg	1050-2133
					5 kg	1050-2134
Puredex® G-25SF	1-5	20-50	0.3	100	100 g	1050-2121
					500 g	1050-2122
					1 kg	1050-2123
					5 kg	1050-2124
Puredex® G-50M	1-30	50-150	0.3	300	100 g	1050-2171
					500 g	1050-2172
					1 kg	1050-2173
					5 kg	1050-2174
Puredex® G-50F	1-30	20-80	0.3	150	100 g	1050-2161
					500 g	1050-2162
					1 kg	1050-2163
					5 kg	1050-2164

Puredex® LH-20

- Chromatography resin based on a dextran-based 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

Product	Exclusion limit (KD)	Range of particle sizes (µm)	Max.back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
Puredex® LH-20	4-5	20-120	0.3	700	100 g	1050-2101
					500 g	1050-2102
					1 kg	1050-2103
					5 kg	1050-2104

Ion Exchange Chromatography

Anion exchange chromatography resin

High flow velocity, low back pressure, and high binding capacity:

- MaXtar® Q
- MaXtar® DEAE

High flow velocity and high resolution:

- MaXtar® Q HR

High binding capacity and high resolution:

- MaXtar® Q HR XL

High flow velocity:

- Q Chromstar® FF
- DEAE Chromstar® FF

High resolution:

- Q Chromstar® HP
- DEAE Chromstar® HP

Ultra-high binding capacity:

- Q Chromstar® XL
- Q Chromstar® BB XL

Special for ultra-high flow velocity:

- Q Chromstar® BB

Classic dextran-based matrix:

- DEAE Puredex® A50

Cation exchange chromatography resin

High flow velocity, low back pressure, and high binding capacity:

- MaXtar® S

High flow velocity and high resolution:

- MaXtar® SP HR

High binding capacity and high resolution:

- MaXtar® SP HR XL

High flow velocity:

- SP Chromstar® FF
- S Chromstar® FF
- CM Chromstar® FF

High resolution:

- SP Chromstar® HP
- CM Chromstar® HP

Ultra-high binding capacity:

- SP Chromstar® XL
- SP Chromstar® BB XL

Special for ultra-high flow velocity:

- SP Chromstar® BB

Classic dextran-based matrix:

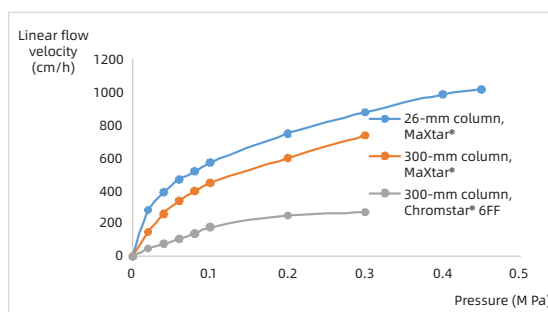
- CM Puredex® C25

High-Flow Velocity Anion Exchange — MaXtar® Q

MaXtar® Q is a strong anion exchange chromatography resin that can separate different molecules by leveraging their differences in the nature and magnitude of charge under specific conditions. It is suitable for the separation and purification of various biomolecules, such as recombinant proteins, antibodies, nucleic acids, viruses, virus-like particles, and polysaccharides.

MaXtar® Q provides superior performance over traditional strong anion exchange chromatography resins:

- The improved MaXtar® matrix has excellent rigidity. This helps to achieve higher process flow velocity under low back pressure, improving process efficiency.
- The dynamic binding capacity of the chromatography resin is increased with an improved ligand conjugating method.



MaXtar®

- Chromatography resin based on an improved agarose-based matrix
- With high flow velocity, low back pressure, and high binding capacity, easy to scale up linearly
- With organic solvent resistance and good chemical stability

MaXtar® prepacked column

Product	Inner diameter × Column bed (mm)	Dynamic binding capacity	Mean particle size (µm)	Max.back pressure (MPa)	Recommended flow velocity (mL/min)	Quantity	Product code
Chrom-Trap® MaXtar® Q 1 mL	7.7/25	> 100 mg BSA/mL	90	0.5	1	1 × 1 mL	2014-1821
Chrom-Screen™ MaXtar® Q 4.7 mL	7.7/100	> 100 mg BSA/mL	90	0.5	1-4.7	1 × 4.7 mL	2014-1822
Chrom-Trap® MaXtar® Q 5 mL	16/25	> 100 mg BSA/mL	90	0.5	1-5	1 × 5 mL	2014-1823
Chrom-Trap® MaXtar® DEAE 1 mL	7.7/25	> 90 mg ovalbumin/mL	90	0.5	1	1 × 1 mL	2015-1821
Chrom-Screen™ MaXtar® DEAE 4.7 mL	7.7/100	> 90 mg ovalbumin/mL	90	0.5	1-4.7	1 × 4.7 mL	2015-1822
Chrom-Trap® MaXtar® DEAE 5 mL	16/25	> 90 mg ovalbumin/mL	90	0.5	1-5	1 × 5 mL	2015-1823
Chrom-Trap® MaXtar® S 1 mL	7.7/25	> 60 mg β-lactoglobulin/mL	90	0.5	1	1 × 1 mL	2012-1821
Chrom-Screen™ MaXtar® S 4.7 mL	7.7/100	> 60 mg β-lactoglobulin/mL	90	0.5	1-4.7	1 × 4.7 mL	2012-1822
Chrom-Trap® MaXtar® S 5 mL	16/25	> 60 mg β-lactoglobulin/mL	90	0.5	1-5	1 × 5 mL	2012-1823

MaXtar® chromatography resin

Product	Dynamic binding capacity	Mean particle size (µm)	Max.back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
MaXtar® Q	> 100 mg BSA/mL	90	0.5	700	25 mL	1014-1821
					100 mL	1014-1822
					500 mL	1014-1823
					1 L	1014-1824
					5 L	1014-1825
					10 L	1014-1826
					20 L	1014-1827
MaXtar® DEAE	> 90 mg ovalbumin/mL	90	0.5	700	25 mL	1015-1821
					100 mL	1015-1822
					500 mL	1015-1823
					1 L	1015-1824
					5 L	1015-1825
					10 L	1015-1826
					20 L	1015-1827
MaXtar® S	> 60 mg β-lactoglobulin/mL	90	0.5	700	25 mL	1012-1821
					100 mL	1012-1822
					500 mL	1012-1823
					1 L	1012-1824
					5 L	1012-1825
					10 L	1012-1826
					20 L	1012-1827

MaXtar® HR

- High-resolution chromatography resin based on an improved agarose-based matrix
- With organic solvent resistance and good chemical stability
- Suitable for fine separation

MaXtar® HR prepacked column

Product	Inner diameter × Column bed (mm)	Dynamic binding capacity	Mean particle size (µm)	Max.back pressure (MPa)	Recommended flow velocity (mL/min)	Quantity	Product code
Chrom-Trap® MaXtar® Q HR 1 mL	7.7/25	> 60 mg BSA/mL	40	0.5	1	1 × 1 mL	2014-1811
Chrom-Screen™ MaXtar® Q HR 4.7 mL	7.7/100	> 60 mg BSA/mL	40	0.5	1-4.7	1 × 4.7 mL	2014-1812
Chrom-Trap® MaXtar® Q HR 5 mL	16/25	> 60 mg BSA/mL	40	0.5	1-5	1 × 5 mL	2014-1813
Chrom-Trap® MaXtar® SP HR 1 mL	7.7/25	> 90 mg lysozyme/mL	40	0.5	1	1 × 1 mL	2011-1811
Chrom-Screen™ MaXtar® SP HR 4.7 mL	7.7/100	> 90 mg lysozyme/mL	40	0.5	1-4.7	1 × 4.7 mL	2011-1812
Chrom-Trap® MaXtar® SP HR 5 mL	16/25	> 90 mg lysozyme/mL	40	0.5	1-5	1 × 5 mL	2011-1813

MaXtar® HR chromatography resin

Product	Dynamic binding capacity	Mean particle size (µm)	Max.back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
MaXtar® Q HR	> 60 mg BSA/mL	40	0.5	600	25 mL	1014-1811
					100 mL	1014-1812
					500 mL	1014-1813
					1 L	1014-1814
					5 L	1014-1815
					10 L	1014-1816
					20 L	1014-1817
MaXtar® SP HR	> 90 mg lysozyme/mL	40	0.5	600	25 mL	1011-1811
					100 mL	1011-1812
					500 mL	1011-1813
					1 L	1011-1814
					5 L	1011-1815
					10 L	1011-1816
					20 L	1011-1817

MaXtar® HR XL

- Chromatography resin based on an improved agarose-based matrix with ultra-high binding capacity and high resolution
- With both high binding capacity and high resolution, presenting excellent cost performance
- With organic solvent resistance and good chemical stability

MaXtar® HR XL prepacked column

Product	Inner diameter × Column bed (mm)	Dynamic binding capacity	Mean particle size (µm)	Max.back pressure (MPa)	Recommended flow velocity (mL/min)	Quantity	Product code
Chrom-Trap® MaXtar® Q HR XL 1 mL	7.7/25	> 160 mg BSA/mL	40	0.5	1	1 × 1 mL	2014-1911
Chrom-Screen™ MaXtar® Q HR XL 4.7 mL	7.7/100	> 160 mg BSA/mL	40	0.5	1-4.7	1 × 4.7 mL	2014-1912
Chrom-Trap® MaXtar® Q HR XL 5 mL	16/25	> 160 mg BSA/mL	40	0.5	1-5	1 × 5 mL	2014-1913
Chrom-Trap® MaXtar® SP HR XL 1 mL	7.7/25	> 160 mg ovalbumin/mL	40	0.5	1	1 × 1 mL	2011-1911
Chrom-Screen™ MaXtar® SP HR XL 4.7 mL	7.7/100	> 160 mg ovalbumin/mL	40	0.5	1-4.7	1 × 4.7 mL	2011-1912
Chrom-Trap® MaXtar® SP HR XL 5 mL	16/25	> 160 mg ovalbumin/mL	40	0.5	1-5	1 × 5 mL	2011-1913

MaXtar® HR XL chromatography resin

Product	Dynamic binding capacity	Mean particle size (µm)	Max.back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
MaXtar® Q HR XL	> 160 mg BSA/mL	40	0.5	600	25 mL	1014-1911
					100 mL	1014-1912
					500 mL	1014-1913
					1 L	1014-1914
					5 L	1014-1915
					10 L	1014-1916
					20 L	1014-1917
MaXtar® SP HR XL	> 160 mg ovalbumin/mL	40	0.5	600	25 mL	1011-1911
					100 mL	1011-1912
					500 mL	1011-1913
					1 L	1011-1914
					5 L	1011-1915
					10 L	1011-1916
					20 L	1011-1917

Chromstar® 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

Product	Dynamic binding capacity	Mean particle size (µm)	Max.back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
Q Chromstar® BB	> 90 mg BSA/mL	200	0.3	1800	25 mL	1014-1141
					100 mL	1014-1142
					500 mL	1014-1143
					1 L	1014-1144
					5 L	1014-1145
					10 L	1014-1146
					20 L	1014-1147
SP Chromstar® BB	> 90 mg lysozyme/mL	200	0.3	1800	25 mL	1011-1141
					100 mL	1011-1142
					500 mL	1011-1143
					1 L	1011-1144
					5 L	1011-1145
					10 L	1011-1146
					20 L	1011-1147

Chromstar® FF

- High-flow velocity chromatography resin based on an agarose-based matrix
- With weak non-specific adsorption and good chemical stability
- Suitable for capture

Chromstar® FF prepacked column

Product	Inner diameter × Column bed (mm)	Dynamic binding capacity	Mean particle size (µm)	Max.back pressure (MPa)	Recommended flow velocity (mL/min)	Quantity	Product code
Chrom-Trap® Q Chromstar® FF 1 mL	7.7/25	> 50 mg BSA/mL	90	0.3	1	1 × 1 mL	2014-1131
Chrom-Screen™ Q Chromstar® FF 4.7 mL	7.7/100	> 50 mg BSA/mL	90	0.3	1-4.7	1 × 4.7 mL	2014-1132
Chrom-Trap® Q Chromstar® FF 5 mL	16/25	> 50 mg BSA/mL	90	0.3	1-5	1 × 5 mL	2014-1133
Chrom-Trap® DEAE Chromstar® FF 1 mL	7.7/25	> 90 mg ovalbumin/mL	90	0.3	1	1 × 1 mL	2015-1131
Chrom-Screen™ DEAE Chromstar® FF 4.7 mL	7.7/100	> 90 mg ovalbumin/mL	90	0.3	1-4.7	1 × 4.7 mL	2015-1132
Chrom-Trap® DEAE Chromstar® FF 5 mL	16/25	> 90 mg ovalbumin/mL	90	0.3	1-5	1 × 5 mL	2015-1133
Chrom-Trap® SP Chromstar® FF 1 mL	7.7/25	> 90 mg lysozyme/mL	90	0.3	1	1 × 1 mL	2011-1131
Chrom-Screen™ SP Chromstar® FF 4.7 mL	7.7/100	> 90 mg lysozyme/mL	90	0.3	1-4.7	1 × 4.7 mL	2011-1132
Chrom-Trap® SP Chromstar® FF 5 mL	16/25	> 90 mg lysozyme/mL	90	0.3	1-5	1 × 5 mL	2011-1133
Chrom-Trap® CM Chromstar® FF 1 mL	7.7/25	> 50 mg lysozyme/mL	90	0.3	1	1 × 1 mL	2013-1131
Chrom-Screen™ CM Chromstar® FF 4.7 mL	7.7/100	> 50 mg lysozyme/mL	90	0.3	1-4.7	1 × 4.7 mL	2013-1132
Chrom-Trap® CM Chromstar® FF 5 mL	16/25	> 50 mg lysozyme/mL	90	0.3	1-5	1 × 5 mL	2013-1133

Chromstar® FF chromatography resin

Product	Dynamic binding capacity	Mean particle size (µm)	Max.back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
Q Chromstar® FF	> 50 mg BSA/mL	90	0.3	700	25 mL	1014-1131
					100 mL	1014-1132
					500 mL	1014-1133
					1 L	1014-1134
					5 L	1014-1135
					10 L	1014-1136
					20 L	1014-1137
DEAE Chromstar® FF	> 90 mg ovalbumin/mL	90	0.3	700	25 mL	1015-1131
					100 mL	1015-1132
					500 mL	1015-1133
					1 L	1015-1134
					5 L	1015-1135
					10 L	1015-1136
					20 L	1015-1137

SP Chromstar® FF	> 90 mg lysozyme/mL	90	0.3	700	25 mL	1011-1131
					100 mL	1011-1132
					500 mL	1011-1133
					1 L	1011-1134
					5 L	1011-1135
					10 L	1011-1136
S Chromstar® FF	> 50 mg β-lactoglobulin/mL	90	0.3	700	20 L	1011-1137
					25 mL	1012-1131
					100 mL	1012-1132
					500 mL	1012-1133
					1 L	1012-1134
					5 L	1012-1135
CM Chromstar® FF	> 50 mg lysozyme/mL	90	0.3	700	10 L	1012-1136
					20 L	1012-1137
					25 mL	1013-1131
					100 mL	1013-1132
					500 mL	1013-1133
					1 L	1013-1134
					5 L	1013-1135
					10 L	1013-1136
					20 L	1013-1137

Chromstar® HP

- High-resolution chromatography resin based on an agarose-based matrix
- With weak non-specific adsorption and good chemical stability
- Suitable for fine separation

Chromstar® HP prepacked column

Product	Inner diameter × Column bed (mm)	Dynamic binding capacity	Mean particle size (µm)	Max.back pressure (MPa)	Recommended flow velocity (mL/min)	Quantity	Product code
Chrom-Trap® Q Chromstar® HP 1 mL	7.7/25	> 90 mg BSA/mL	34	0.3	1	1 × 1 mL	2014-1111
Chrom-Screen™ Q Chromstar® HP 4.7 mL	7.7/100	> 90 mg BSA/mL	34	0.3	1-4.7	1 × 4.7 mL	2014-1112
Chrom-Trap® Q Chromstar® HP 5 mL	16/25	> 90 mg BSA/mL	34	0.3	1-5	1 × 5 mL	2014-1113
Chrom-Trap® DEAE Chromstar® HP 1 mL	7.7/25	> 90 mg ovalbumin/mL	34	0.3	1	1 × 1 mL	2015-1111
Chrom-Screen™ DEAE Chromstar® HP 4.7 mL	7.7/100	> 90 mg ovalbumin/mL	34	0.3	1-4.7	1 × 4.7 mL	2015-1112
Chrom-Trap® DEAE Chromstar® HP 5 mL	16/25	> 90 mg ovalbumin/mL	34	0.3	1-5	1 × 5 mL	2015-1113
Chrom-Trap® SP Chromstar® HP 1 mL	7.7/25	> 90 mg lysozyme/mL	34	0.3	1	1 × 1 mL	2011-1111
Chrom-Screen™ SP Chromstar® HP 4.7 mL	7.7/100	> 90 mg lysozyme/mL	34	0.3	1-4.7	1 × 4.7 mL	2011-1112
Chrom-Trap® SP Chromstar® HP 5 mL	16/25	> 90 mg lysozyme/mL	34	0.3	1-5	1 × 5 mL	2011-1113

Chromstar® HP chromatography resin

Product	Dynamic binding capacity	Mean particle size (µm)	Max. back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
Q Chromstar® HP	> 90 mg BSA/mL	34	0.3	200	25 mL	1014-1111
					100 mL	1014-1112
					500 mL	1014-1113
					1 L	1014-1114
					5 L	1014-1115
					10 L	1014-1116
					20 L	1014-1117
DEAE Chromstar® HP	> 90 mg ovalbumin/mL	34	0.3	200	25 mL	1015-1111
					100 mL	1015-1112
					500 mL	1015-1113
					1 L	1015-1114
					5 L	1015-1115
					10 L	1015-1116
					20 L	1015-1117
SP Chromstar® HP	> 90 mg lysozyme/mL	34	0.3	200	25 mL	1011-1111
					100 mL	1011-1112
					500 mL	1011-1113
					1 L	1011-1114
					5 L	1011-1115
					10 L	1011-1116
					20 L	1011-1117
CM Chromstar® HP	> 50 mg lysozyme/mL	34	0.3	200	25 mL	1013-1111
					100 mL	1013-1112
					500 mL	1013-1113
					1 L	1013-1114
					5 L	1013-1115
					10 L	1013-1116
					20 L	1013-1117

Chromstar® XL

- Chromatography resin based on an agarose-based matrix with ultra-high binding capacity
- With organic solvent resistance and good chemical stability

Chromstar® XL prepacked column

Product	Inner diameter × Column bed (mm)	Dynamic binding capacity	Mean particle size (µm)	Max.back pressure (MPa)	Recommended flow velocity (mL/min)	Quantity	Product code
Chrom-Trap® Q Chromstar® XL 1 mL	7.7/25	> 160 mg BSA/mL	90	0.3	1	1 × 1 mL	2014-1231
Chrom-Screen™ Q Chromstar® XL 4.7 mL	7.7/100	> 160 mg BSA/mL	90	0.3	1-4.7	1 × 4.7 mL	2014-1232
Chrom-Trap® Q Chromstar® XL 5 mL	16/25	> 160 mg BSA/mL	90	0.3	1-5	1 × 5 mL	2014-1233
Chrom-Trap® SP Chromstar® XL 1 mL	7.7/25	> 160 mg lysozyme/mL	90	0.3	1	1 × 1 mL	2011-1231
Chrom-Screen™ SP Chromstar® XL 4.7 mL	7.7/100	> 160 mg lysozyme/mL	90	0.3	1-4.7	1 × 4.7 mL	2011-1232
Chrom-Trap® SP Chromstar® XL 5 mL	16/25	> 160 mg lysozyme/mL	90	0.3	1-5	1 × 5 mL	2011-1233

Chromstar® XL chromatography resin

Product	Dynamic binding capacity	Mean particle size (µm)	Max.back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
Q Chromstar® XL	> 160 mg BSA/mL	90	0.3	500	25 mL	1014-1231
					100 mL	1014-1232
					500 mL	1014-1233
					1 L	1014-1234
					5 L	1014-1235
					10 L	1014-1236
					20 L	1014-1237
Q Chromstar® BB XL	> 160 mg BSA/mL	200	0.3	1200	25 mL	1014-1241
					100 mL	1014-1242
					500 mL	1014-1243
					1 L	1014-1244
					5 L	1014-1245
					10 L	1014-1246
					20 L	1014-1247
SP Chromstar® XL	> 160 mg lysozyme/mL	90	0.3	500	25 mL	1011-1231
					100 mL	1011-1232
					500 mL	1011-1233
					1 L	1011-1234
					5 L	1011-1235
					10 L	1011-1236
					20 L	1011-1237

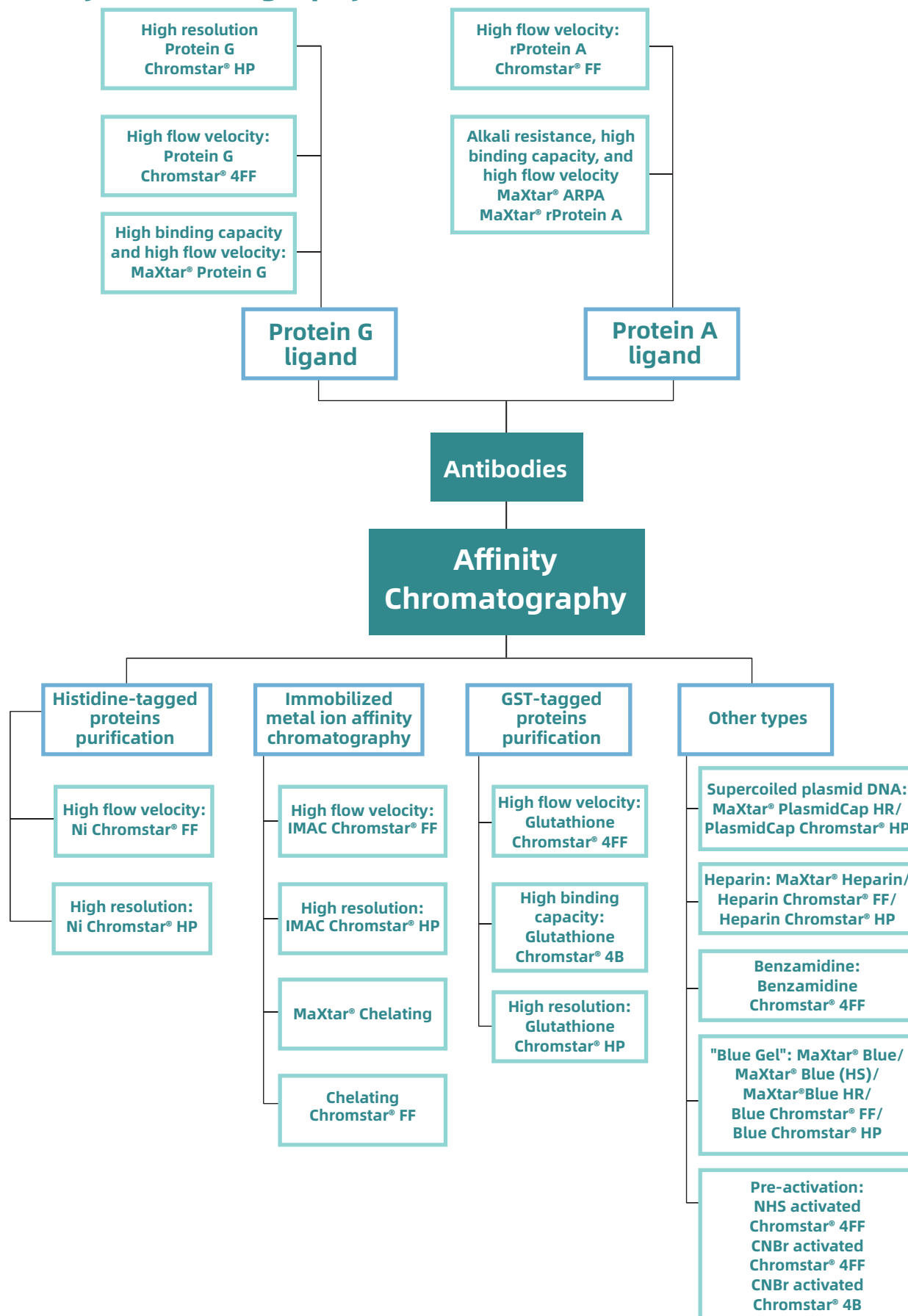
SP Chromstar® BB XL	> 160 mg lysozyme/mL	200	0.3	1200	25 mL	1011-1241
					100 mL	1011-1242
					500 mL	1011-1243
					1 L	1011-1244
					5 L	1011-1245
					10 L	1011-1246
					20 L	1011-1247

Puredex®

- Chromatography resin based on a dextran-based matrix
- With organic solvent resistance and good chemical stability

Product	Dynamic binding capacity	Mean particle size (µm)	Max. back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
DEAE Puredex® A50	> 70 mg ovalbumin/mL	40-100	0.3	100	100 g	1015-2161
					500 g	1015-2162
					1 kg	1015-2163
					5 kg	1015-2164
CM Puredex® C25	> 50 mg lysozyme/mL	40-100	0.3	150	100 g	1013-2131
					500 g	1013-2132
					1 kg	1013-2133
					5 kg	1013-2134

Affinity Chromatography



Antibody purification

- Chromatography resin based on an improved agarose-based matrix
- With wide pH range resistance and good chemical stability
- Optional Protein A or Protein G ligand

Prepacked column for antibody purification

Product	Inner diameter × Column bed (mm)	Feature	Mean particle size (µm)	Max.back pressure (MPa)	Recommended flow velocity (mL/min)	Quantity	Product code
Chrom-Trap® MaXtar® ARPA 1 mL	7.7/25	Alkali resistance High binding capacity High flow velocity rProtein A ligand	85	0.5	0.5	1 × 1 mL	2024-1821
Chrom-Screen™ MaXtar® ARPA 4.7 mL	7.7/100	Alkali resistance High binding capacity High flow velocity rProtein A ligand	85	0.5	0.5-2.5	1 × 4.7 mL	2024-1822
Chrom-Trap® MaXtar® ARPA 5 mL	16/25	Alkali resistance High binding capacity High flow velocity rProtein A ligand	85	0.5	1-2.5	1 × 5 mL	2024-1823
Chrom-Trap® rProtein A Chromstar® FF 1 mL	7.7/25	High flow velocity rProtein A ligand	90	0.3	0.5	1 × 1 mL	2034-1131
Chrom-Screen™ rProtein A Chromstar® FF 4.7 mL	7.7/100	High flow velocity rProtein A ligand	90	0.3	0.5-2.5	1 × 4.7 mL	2034-1132
Chrom-Trap® rProtein A Chromstar® FF 5 mL	16/25	High flow velocity rProtein A ligand	90	0.3	1-2.5	1 × 5 mL	2034-1133
Chrom-Trap® MaXtar® Protein G 1 mL	7.7/25	High binding capacity High flow velocity Protein G ligand	85	0.5	0.5	1 × 1 mL	2026-1821
Chrom-Screen™ MaXtar® Protein G 4.7 mL	7.7/100	High binding capacity High flow velocity Protein G ligand	85	0.5	0.5-2.5	1 × 4.7 mL	2026-1822
Chrom-Trap® MaXtar® Protein G 5 mL	16/25	High binding capacity High flow velocity Protein G ligand	85	0.5	1-2.5	1 × 5 mL	2026-1823
Chrom-Trap® Protein G Chromstar® HP 1 mL	7.7/25	High resolution Protein G ligand	34	0.3	0.5	1 × 1 mL	2026-1111
Chrom-Screen™ Protein G Chromstar® HP 4.7 mL	7.7/100	High resolution Protein G ligand	34	0.3	0.5-2.5	1 × 4.7 mL	2026-1112
Chrom-Trap® Protein G Chromstar® HP 5 mL	16/25	High resolution Protein G ligand	34	0.3	1-2.5	1 × 5 mL	2026-1113

Chromatography resin for antibody purification

Product	Feature	Mean particle size (µm)	Max.back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
MaXtar® ARPA	Alkali resistance High binding capacity High flow velocity rProtein A ligand	85	0.5	500	25 mL	1024-1821
					100 mL	1024-1822
					500 mL	1024-1823
					1 L	1024-1824
					5 L	1024-1825
					10 L	1024-1826
					20 L	1024-1827
MaXtar® rProtein A	Alkali resistance High binding capacity High flow velocity rProtein A ligand	85	0.5	700	25 mL	1034-1821
					100 mL	1034-1822
					500 mL	1034-1823
					1 L	1034-1824
					5 L	1034-1825
					10 L	1034-1826
					20 L	1034-1827
rProtein A Chromstar® FF	High flow velocity rProtein A ligand	90	0.3	300	25 mL	1034-1131
					100 mL	1034-1132
					500 mL	1034-1133
					1 L	1034-1134
					5 L	1034-1135
					10 L	1034-1136
					20 L	1034-1137
MaXtar® Protein G	High binding capacity High flow velocity Protein G ligand	85	0.5	700	25 mL	1026-1821
					100 mL	1026-1822
					500 mL	1026-1823
					1 L	1026-1824
					5 L	1026-1825
					10 L	1026-1826
					20 L	1026-1827
Protein G Chromstar® 4FF	High flow velocity Protein G ligand	90	0.3	400	25 mL	1026-1121
					100 mL	1026-1122
					500 mL	1026-1123
					1 L	1026-1124
					5 L	1026-1125
					10 L	1026-1126
					20 L	1026-1127

Protein G Chromstar® HP	High resolution Protein G ligand	34	0.3	200	25 mL	1026-1111
					100 mL	1026-1112
					500 mL	1026-1113
					1 L	1026-1114
					5 L	1026-1115
					10 L	1026-1116
					20 L	1026-1117

Histidine-tagged proteins purification

- Chromatography resin based on an improved agarose-based matrix
- With good tolerance and chemical stability

Prepacked column for histidine-tagged proteins purification

Product	Inner diameter × Column bed (mm)	Dynamic binding capacity	Mean particle size (µm)	Max.back pressure (MPa)	Recommended flow velocity (mL/min)	Quantity	Product code
Chrom-Trap® Ni Chromstar® FF 1 mL	7.7/25	40 mg His-tagged protein/mL	90	0.3	1	1 × 1 mL	2021-1131
Chrom-Screen™ Ni Chromstar® FF 4.7 mL	7.7/100	40 mg His-tagged protein/mL	90	0.3	1-4.7	1 × 4.7 mL	2021-1132
Chrom-Trap® Ni Chromstar® FF 5 mL	16/25	40 mg His-tagged protein/mL	90	0.3	1-5	1 × 5 mL	2021-1133
Chrom-Trap® Ni Chromstar® HP 1 mL	7.7/25	40 mg His-tagged protein/mL	34	0.3	1	1 × 1 mL	2021-1111
Chrom-Screen™ Ni Chromstar® HP 4.7 mL	7.7/100	40 mg His-tagged protein/mL	34	0.3	1-4.7	1 × 4.7 mL	2021-1112
Chrom-Trap® Ni Chromstar® HP 5 mL	16/25	40 mg His-tagged protein/mL	34	0.3	1-5	1 × 5 mL	2021-1113

Chromatography resin for histidine-tagged proteins purification

Product	Dynamic binding capacity	Mean particle size (µm)	Max.back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
Ni Chromstar® FF	40 mg His-tagged protein/mL	90	0.3	400	25 mL	1021-1131
					100 mL	1021-1132
					500 mL	1021-1133
					1 L	1021-1134
					5 L	1021-1135
					10 L	1021-1136
					20 L	1021-1137
Ni Chromstar® HP	40 mg His-tagged protein/mL	34	0.3	200	25 mL	1021-1111
					100 mL	1021-1112
					500 mL	1021-1113
					1 L	1021-1114
					5 L	1021-1115
					10 L	1021-1116
20 L	1021-1117					

Immobilized metal ion affinity chromatography

- Chromatography resin based on an improved agarose-based matrix
- With excellent rigidity, high flow velocity, and optional metal ions for chelation

Prepacked column for immobilized metal ion affinity chromatography

Product	Inner diameter × Column bed (mm)	Mean particle size (μm)	Max.back pressure (MPa)	Recommended flow velocity (mL/min)	Quantity	Product code
Chrom-Trap® IMAC Chromstar® FF 1 mL	7.7/25	90	0.3	1	1 × 1 mL	2027-1131
Chrom-Screen™ IMAC Chromstar® FF 4.7 mL	7.7/100	90	0.3	1-4.7	1 × 4.7 mL	2027-1132
Chrom-Trap® IMAC Chromstar® FF 5 mL	16/25	90	0.3	1-5	1 × 5 mL	2027-1133
Chrom-Trap® IMAC Chromstar® HP 1 mL	7.7/25	34	0.3	1	1 × 1 mL	2027-1111
Chrom-Screen™ IMAC Chromstar® HP 4.7 mL	7.7/100	34	0.3	1-4.7	1 × 4.7 mL	2027-1112
Chrom-Trap® IMAC Chromstar® HP 5 mL	16/25	34	0.3	1-5	1 × 5 mL	2027-1113
Chrom-Trap® MaXtar® Chelating 1 mL	7.7/25	75	0.5	1	1 × 1 mL	2022-1821
Chrom-Screen™ MaXtar® Chelating 4.7 mL	7.7/100	75	0.5	1-4.7	1 × 4.7 mL	2022-1822
Chrom-Trap® MaXtar® Chelating 5 mL	16/25	75	0.5	1-5	1 × 5 mL	2022-1823
Chrom-Trap® Chelating Chromstar® FF 1 mL	7.7/25	90	0.3	1	1 × 1 mL	2022-1131
Chrom-Screen™ Chelating Chromstar® FF 4.7 mL	7.7/100	90	0.3	1-4.7	1 × 4.7 mL	2022-1132
Chrom-Trap® Chelating Chromstar® FF 5 mL	16/25	90	0.3	1-5	1 × 5 mL	2022-1133

Chromatography resin for immobilized metal ion affinity chromatography

Product	Mean particle size (μm)	Max.back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
IMAC Chomstar FF	90	0.3	600	25 mL	1027-1131
				100 mL	1027-1132
				500 mL	1027-1133
				1 L	1027-1134
				5 L	1027-1135
				10 L	1027-1136
IMAC Chomstar HP	34	0.3	200	20 L	1027-1137
				25 mL	1027-1111
				100 mL	1027-1112
				500 mL	1027-1113
				1 L	1027-1114
				5 L	1027-1115
				10 L	1027-1116
				20 L	1027-1117

MaXtar® Chelating	75	0.5	600	25 mL	1022-1821
				100 mL	1022-1822
				500 mL	1022-1823
				1 L	1022-1824
				5 L	1022-1825
				10 L	1022-1826
				20 L	1022-1827
Chelating Chromstar® FF	90	0.3	400	25 mL	1022-1131
				100 mL	1022-1132
				500 mL	1022-1133
				1 L	1022-1134
				5 L	1022-1135
				10 L	1022-1136
				20 L	1022-1137

GST-tagged proteins purification

- Chromatography resin based on an improved agarose-based matrix
- With good tolerance and chemical stability

Prepacked column for GST-tagged proteins purification

Product	Inner diameter × Column bed (mm)	Dynamic binding capacity	Mean particle size (µm)	Max.back pressure (MPa)	Recommended flow velocity (mL/min)	Quantity	Product code
Chrom-Trap® Glutathione Chromstar® 4FF 1 mL	7.7/25	10 mg GST-tagged protein/mL	90	0.3	1	1 × 1 mL	2028-1121
Chrom-Screen™ Glutathione Chromstar® 4FF 4.7 mL	7.7/100	10 mg GST-tagged protein/mL	90	0.3	1-4.7	1 × 4.7 mL	2028-1122
Chrom-Trap® Glutathione Chromstar® 4FF 5 mL	16/25	10 mg GST-tagged protein/mL	90	0.3	1-5	1 × 5 mL	2028-1123
Chrom-Trap® Glutathione Chromstar® 4B 1 mL	7.7/25	25 mg GST-tagged protein/mL	90	0.3	1	1 × 1 mL	2028-1171
Chrom-Screen™ Glutathione Chromstar® 4B 4.7 mL	7.7/100	25 mg GST-tagged protein/mL	90	0.3	1-4.7	1 × 4.7 mL	2028-1172
Chrom-Trap® Glutathione Chromstar® 4B 5 mL	16/25	25 mg GST-tagged protein/mL	90	0.3	1-5	1 × 5 mL	2028-1173
Chrom-Trap® Glutathione Chromstar® HP 1 mL	7.7/25	10 mg GST-tagged protein/mL	34	0.3	1	1 × 1 mL	2028-1111
Chrom-Screen™ Glutathione Chromstar® HP 4.7 mL	7.7/100	10 mg GST-tagged protein/mL	34	0.3	1-4.7	1 × 4.7 mL	2028-1112
Chrom-Trap® Glutathione Chromstar® HP 5 mL	16/25	10 mg GST-tagged protein/mL	34	0.3	1-5	1 × 5 mL	2028-1113

Chromatography resin for GST-tagged proteins purification

Product	Dynamic binding capacity	Mean particle size (µm)	Max.back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
Glutathione Chromstar® 4FF	10 mg GST-tagged protein/mL	90	0.3	450	25 mL	1028-1121
					100 mL	1028-1122
					500 mL	1028-1123
					1 L	1028-1124
					5 L	1028-1125
					10 L	1028-1126
					20 L	1028-1127
Glutathione Chromstar® 4B	25 mg GST-tagged protein/mL	90	0.3	450	25 mL	1028-1171
					100 mL	1028-1172
					500 mL	1028-1173
					1 L	1028-1174
					5 L	1028-1175
					10 L	1028-1176
Glutathione Chromstar® HP	10 mg GST-tagged protein/mL	34	0.3	450	25 mL	1028-1111
					100 mL	1028-1112
					500 mL	1028-1113
					1 L	1028-1114
					5 L	1028-1115
					10 L	1028-1116
					20 L	1028-1117

Other types

- Chromatography resin based on an improved agarose-based matrix
- With wide range resistance and good chemical stability
- With multiple particle sizes for the separation of multiple samples

Prepacked column for other types of affinity

Product	Inner diameter × Column bed (mm)	Feature	Mean particle size (µm)	Max.back pressure (MPa)	Recommended flow velocity (mL/min)	Quantity	Product code
Chrom-Trap® MaXtar® PlasmidCap HR 1 mL	7.7/25	High binding capacity High flow velocity High resolution For separation of supercoiled plasmid DNA	40	0.5	1	1 × 1 mL	2031-1821
Chrom-Screen™ MaXtar® PlasmidCap HR 4.7 mL	7.7/100	High binding capacity High flow velocity High resolution For separation of supercoiled plasmid DNA	40	0.5	1-4.7	1 × 4.7 mL	2031-1822
Chrom-Trap® MaXtar® PlasmidCap HR 5 mL	16/25	High binding capacity High flow velocity High resolution For separation of supercoiled plasmid DNA	40	0.5	1-5	1 × 5 mL	2031-1823
Chrom-Trap® Heparin Chromstar® FF 1 mL	7.7/25	High flow velocity For separation of anticoagulant factors, interferon, and DNA-binding proteins	90	0.3	1	1 × 1 mL	2023-1131
Chrom-Screen™ Heparin Chromstar® FF 4.7 mL	7.7/100	High flow velocity For separation of anticoagulant factors, interferon, and DNA-binding proteins	90	0.3	1-4.7	1 × 4.7 mL	2023-1132
Chrom-Trap® Heparin Chromstar® FF 5 mL	16/25	High flow velocity For separation of anticoagulant factors, interferon, and DNA-binding proteins	90	0.3	1-5	1 × 5 mL	2023-1133
Chrom-Trap® Heparin Chromstar® HP 1 mL	7.7/25	High resolution For separation of anticoagulant factors, interferon, and DNA-binding proteins	34	0.3	1	1 × 1 mL	2023-1111
Chrom-Screen™ Heparin Chromstar® HP 4.7 mL	7.7/100	High resolution For separation of anticoagulant factors, interferon, and DNA-binding proteins	34	0.3	1-4.7	1 × 4.7 mL	2023-1112
Chrom-Trap® Heparin Chromstar® HP 5 mL	16/25	High resolution For separation of anticoagulant factors, interferon, and DNA-binding proteins	34	0.3	1-5	1 × 5 mL	2023-1113

Chrom-Trap® Benzamidine Chromstar® 4FF (HS) 1 mL	7.7/25	High flow velocity High degree of ligand substitution For separation of serine protease and trypsin	90	0.3	1	1 × 1 mL	2025-1121
Chrom-Screen™ Benzamidine Chromstar® 4FF (HS) 4.7 mL	7.7/100	High flow velocity High degree of ligand substitution For separation of serine protease and trypsin	90	0.3	1-4.7	1 × 4.7 mL	2025-1122
Chrom-Trap® Benzamidine Chromstar® 4FF (HS) 5 mL	16/25	High flow velocity High degree of ligand substitution For separation of serine protease and trypsin	90	0.3	1-5	1 × 5 mL	2025-1123
Chrom-Trap® MaXtar® Blue 1 mL	7.7/25	High binding capacity High flow velocity For separation of antithrombin, lipoprotein, interferon, and albumin	75	0.5	1	1 × 1 mL	2030-1821
Chrom-Screen™ MaXtar® Blue 4.7 mL	7.7/100	High binding capacity High flow velocity For separation of antithrombin, lipoprotein, interferon, and albumin	75	0.5	1-4.7	1 × 4.7 mL	2030-1822
Chrom-Trap® MaXtar® Blue 5 mL	16/25	High binding capacity High flow velocity For separation of antithrombin, lipoprotein, interferon, and albumin	75	0.5	1-5	1 × 5 mL	2030-1823
Chrom-Trap® MaXtar® Blue (HS) 1 mL	7.7/25	High degree of ligand substitution Ultra-high binding capacity High flow velocity For separation of antithrombin, lipoprotein, interferon, and albumin	75	0.5	1	1 × 1 mL	2032-1821
Chrom-Screen™ MaXtar® Blue (HS) 4.7 mL	7.7/100	High degree of ligand substitution Ultra-high binding capacity High flow velocity For separation of antithrombin, lipoprotein, interferon, and albumin	75	0.5	1-4.7	1 × 4.7 mL	2032-1822
Chrom-Trap® MaXtar® Blue (HS) 5 mL	16/25	High degree of ligand substitution Ultra-high binding capacity High flow velocity For separation of antithrombin, lipoprotein, interferon, and albumin	75	0.5	1-5	1 × 5 mL	2032-1823

Chrom-Screen™ Blue Chromstar® FF 4.7 mL	7.7/100	High flow velocity For separation of antithrombin, lipoprotein, interferon, and albumin	90	0.15	1-4.7	1 × 4.7 mL	2030-1132
Chrom-Trap® Blue Chromstar® HP 1 mL	7.7/25	High resolution For separation of antithrombin, lipoprotein, interferon, and albumin	34	0.3	1	1 × 1 mL	2030-1111
Chrom-Screen™ Blue Chromstar® HP 4.7 mL	7.7/100	High resolution For separation of antithrombin, lipoprotein, interferon, and albumin	34	0.3	1-4.7	1 × 4.7 mL	2030-1112
Chrom-Trap® Blue Chromstar® HP 5 mL	16/25	High resolution For separation of antithrombin, lipoprotein, interferon, and albumin	34	0.3	1-5	1 × 5 mL	2030-1113
Chrom-Trap® NHS activated Chromstar® 4FF 1 mL	7.7/25	Pre-activated chromatography resin Rapidly binding with free amino groups With spacer arm Strong chemical stability of covalent bonds With resistance to high pH	90	0.3	1	1 × 1 mL	2071-1121
Chrom-Screen™ NHS activated Chromstar® 4FF 4.7 mL	7.7/100	Pre-activated chromatography resin Rapidly binding with free amino groups With spacer arm Strong chemical stability of covalent bonds With resistance to high pH	90	0.3	1-4.7	1 × 4.7 mL	2071-1122
Chrom-Trap® NHS activated Chromstar® 4FF 5 mL	16/25	Pre-activated chromatography resin Rapidly binding with free amino groups With spacer arm Strong chemical stability of covalent bonds With resistance to high pH	90	0.3	1-5	1 × 5 mL	2071-1123

Chromatography resin for other types of affinity

Product	Feature	Mean particle size (µm)	Max. flow velocity (cm/h)	Quantity	Product code
MaXtar® PlasmidCap HR	High binding capacity High flow velocity High resolution For separation of supercoiled plasmid DNA	40	600	25 mL	1031-1821
				100 mL	1031-1822
				500 mL	1031-1823
				1 L	1031-1824
				5 L	1031-1825
				10 L	1031-1826
				20 L	1031-1827

PlasmidCap Chromstar® HP	High resolution For separation of supercoiled plasmid DNA	34	200	25 mL	1031-1111
				100 mL	1031-1112
				500 mL	1031-1113
				1 L	1031-1114
				5 L	1031-1115
				10 L	1031-1116
				20 L	1031-1117
MaXtar® Heparin	High binding capacity High flow velocity For separation of anticoagulant factors, interferon, and DNA-binding proteins	90	700	25 mL	1023-1821
				100 mL	1023-1822
				500 mL	1023-1823
				1 L	1023-1824
				5 L	1023-1825
				10 L	1023-1826
				20 L	1023-1827
Heparin Chromstar® FF	High flow velocity For separation of anticoagulant factors, interferon, and DNA-binding proteins	90	400	25 mL	1023-1131
				100 mL	1023-1132
				500 mL	1023-1133
				1 L	1023-1134
				5 L	1023-1135
				10 L	1023-1136
				20 L	1023-1137
Heparin Chromstar® HP	High resolution For separation of anticoagulant factors, interferon, and DNA-binding proteins	34	200	25 mL	1023-1111
				100 mL	1023-1112
				500 mL	1023-1113
				1 L	1023-1114
				5 L	1023-1115
				10 L	1023-1116
				20 L	1023-1117
Benzamidine Chromstar® 4FF (HS)	High flow velocity High degree of ligand substitution For separation of serine protease and trypsin	90	400	25 mL	1025-1121
				100 mL	1025-1122
				500 mL	1025-1123
				1 L	1025-1124
				5 L	1025-1125
				10 L	1025-1126
				20 L	1025-1127
Benzamidine Chromstar® 4FF (LS)	High flow velocity Low degree of ligand substitution For separation of serine protease and trypsin	90	400	25 mL	1033-1121
				100 mL	1033-1122
				500 mL	1033-1123
				1 L	1033-1124
				5 L	1033-1125
				10 L	1033-1126
				20 L	1033-1127
MaXtar® Blue	High binding capacity High flow velocity For separation of antithrombin, lipoprotein, interferon, and albumin	75	600	25 mL	1030-1821
				100 mL	1030-1822
				500 mL	1030-1823
				1 L	1030-1824
				5 L	1030-1825
				10 L	1030-1826
				20 L	1030-1827

MaXtar® Blue (HS)	High degree of ligand substitution Ultra-high binding capacity High flow velocity For separation of antithrombin, lipoprotein, interferon, and albumin	75	600	25 mL	1032-1821
				100 mL	1032-1822
				500 mL	1032-1823
				1 L	1032-1824
				5 L	1032-1825
				10 L	1032-1826
				20 L	1032-1827
MaXtar® Blue HR	High resolution High flow velocity For separation of antithrombin, lipoprotein, interferon, and albumin	40	600	25 mL	1030-1811
				100 mL	1030-1812
				500 mL	1030-1813
				1 L	1030-1814
				5 L	1030-1815
				10 L	1030-1816
				20 L	1030-1817
Blue Chromstar® FF	High flow velocity For separation of antithrombin, lipoprotein, interferon, and albumin	90	300	25 mL	1030-1131
				100 mL	1030-1132
				500 mL	1030-1133
				1 L	1030-1134
				5 L	1030-1135
				10 L	1030-1136
				20 L	1030-1137
Blue Chromstar® HP	High resolution For separation of antithrombin, lipoprotein, interferon, and albumin	34	200	25 mL	1030-1111
				100 mL	1030-1112
				500 mL	1030-1113
				1 L	1030-1114
				5 L	1030-1115
				10 L	1030-1116
				20 L	1030-1117
NHS activated Chromstar® 4FF	Pre-activated chromatography resin Rapidly binding with free amino groups With spacer arm Strong chemical stability of covalent bonds With resistance to high pH	90	700	25 mL	1071-1121
				100 mL	1071-1122
				500 mL	1071-1123
				1 L	1071-1124
				5 L	1071-1125
				10 L	1071-1126
				20 L	1071-1127
CNBr activated Chromstar® 4FF	Pre-activated chromatography resin Conjugating with high-molecular-weight ligands containing amino groups Multi-point binding to prevent the ligands from falling off	90	700	25 mL	1075-1121
				100 mL	1075-1122
				500 mL	1075-1123
				1 L	1075-1124
				5 L	1075-1125
				10 L	1075-1126
				20 L	1075-1127
CNBr activated Chromstar® 4B	Pre-activated chromatography resin Conjugating with high-molecular-weight ligands containing amino groups Multi-point binding to prevent the ligands from falling off	90	75	25 mL	1075-1171
				100 mL	1075-1172
				500 mL	1075-1173
				1 L	1075-1174
				5 L	1075-1175
				10 L	1075-1176
				20 L	1075-1177

Hydrophobic Interaction Chromatography

MaXtar®

- High-flow velocity chromatography resin based on an improved agarose-based matrix
- With excellent rigidity, high flow velocity, low back pressure, easy to scale up
- With resistance to high-concentration salt, wide pH range, and organic solvents, and with good chemical stability

MaXtar® prepacked column

Product	Inner diameter × Column bed (mm)	Feature	Mean particle size (µm)	Max.back pressure (MPa)	Recommended flow velocity (mL/min)	Quantity	Product code
Chrom-Trap® MaXtar® Phenyl (HS) 1 mL	7.7/25	High degree of ligand substitution Ultra-strong hydrophobicity	75	0.5	1	1 × 1 mL	2045-1821
Chrom-Screen™ MaXtar® Phenyl (HS) 4.7 mL	7.7/100	High degree of ligand substitution Ultra-strong hydrophobicity	75	0.5	1-4.7	1 × 4.7 mL	2045-1822
Chrom-Trap® MaXtar® Phenyl (HS) 5 mL	16/25	High degree of ligand substitution Ultra-strong hydrophobicity	75	0.5	1-5	1 × 5 mL	2045-1823
Chrom-Trap® MaXtar® Butyl 1 mL	7.7/25	Weak hydrophobicity	75	0.5	1	1 × 1 mL	2041-1821
Chrom-Screen™ MaXtar® Butyl 4.7 mL	7.7/100	Weak hydrophobicity	75	0.5	1-4.7	1 × 4.7 mL	2041-1822
Chrom-Trap® MaXtar® Butyl 5 mL	16/25	Weak hydrophobicity	75	0.5	1-5	1 × 5 mL	2041-1823
Chrom-Trap® MaXtar® Octyl 1 mL	7.7/25	Strong hydrophobicity	75	0.5	1	1 × 1 mL	2043-1821

MaXtar® chromatography resin

Product	Feature	Mean particle size (µm)	Max.back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
MaXtar® Phenyl (HS)	High degree of ligand substitution Ultra-strong hydrophobicity	75	0.5	600	25 mL	1045-1821
					100 mL	1045-1822
					500 mL	1045-1823
					1 L	1045-1824
					5 L	1045-1825
					10 L	1045-1826
					20 L	1045-1827
MaXtar® Phenyl (LS)	Low degree of ligand substitution Strong hydrophobicity	75	0.5	600	25 mL	1044-1821
					100 mL	1044-1822
					500 mL	1044-1823
					1 L	1044-1824
					5 L	1044-1825
					10 L	1044-1826
					20 L	1044-1827

MaXtar® Butyl	Week hydrophobicity	75	0.5	600	25 mL	1041-1821
					100 mL	1041-1822
					500 mL	1041-1823
					1 L	1041-1824
					5 L	1041-1825
					10 L	1041-1826
					20 L	1041-1827
MaXtar® Octyl	Strong hydrophobicity	75	0.5	600	25 mL	1043-1821
					100 mL	1043-1822
					500 mL	1043-1823
					1 L	1043-1824
					5 L	1043-1825
					10 L	1043-1826
					20 L	1043-1827

MaXtar® HR

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

MaXtar® HR prepacked column

Product	Inner diameter × Column bed (mm)	Feature	Mean particle size (µm)	Max.back pressure (MPa)	Recommended flow velocity (mL/min)	Quantity	Product code
Chrom-Trap® MaXtar® Phenyl HR 1 mL	7.7/25	Ultra-strong hydrophobicity	40	0.5	1	1 × 1 mL	2045-1811
Chrom-Screen™ MaXtar® Phenyl HR 4.7 mL	7.7/100	Ultra-strong hydrophobicity	40	0.5	1-4.7	1 × 4.7 mL	2045-1812
Chrom-Trap® MaXtar® Phenyl HR 5 mL	16/25	Ultra-strong hydrophobicity	40	0.5	1-5	1 × 5 mL	2045-1813
Chrom-Trap® MaXtar® Butyl HR 1 mL	7.7/25	Week hydrophobicity	40	0.5	1	1 × 1 mL	2041-1811
Chrom-Screen™ MaXtar® Butyl HR 4.7 mL	7.7/100	Week hydrophobicity	40	0.5	1-4.7	1 × 4.7 mL	2041-1812
Chrom-Trap® MaXtar® Butyl HR 5 mL	16/25	Week hydrophobicity	40	0.5	1-5	1 × 5 mL	2041-1813

MaXtar® HR chromatography resin

Product	Feature	Mean particle size (µm)	Max.back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
MaXtar® Phenyl HR	Ultra-strong hydrophobicity	40	0.5	600	25 mL	1045-1811
					100 mL	1045-1812
					500 mL	1045-1813
					1 L	1045-1814
					5 L	1045-1815
					10 L	1045-1816
					20 L	1045-1817
MaXtar® Octyl HR	Strong hydrophobicity	40	0.5	600	25 mL	1043-1811
					100 mL	1043-1812
					500 mL	1043-1813
					1 L	1043-1814
					5 L	1043-1815
					10 L	1043-1816
					20 L	1043-1817
MaXtar® Butyl HR	Weak hydrophobicity	40	0.5	600	25 mL	1041-1811
					100 mL	1041-1812
					500 mL	1041-1813
					1 L	1041-1814
					5 L	1041-1815
					10 L	1041-1816
					20 L	1041-1817

Chromstar® FF

- Chromatography resin based on an improved agarose-based matrix
- With resistance to high-concentration salt, wide pH range, and organic solvents, and with good chemical stability

Chromstar® FF prepacked column

Product	Inner diameter × Column bed (mm)	Feature	Mean particle size (µm)	Max.back pressure (MPa)	Recommended flow velocity (mL/min)	Quantity	Product code
Chrom-Trap® Phenyl Chromstar® 6FF (HS) 1 mL	7.7/25	High degree of ligand substitution Ultra-strong hydrophobicity	90	0.3	1	1 × 1 mL	2045-1131
Chrom-Screen™ Phenyl Chromstar® 6FF (HS) 4.7 mL	7.7/100	High degree of ligand substitution Ultra-strong hydrophobicity	90	0.3	1-4.7	1 × 4.7 mL	2045-1132
Chrom-Trap® Phenyl Chromstar® 6FF (HS) 5 mL	16/25	High degree of ligand substitution Ultra-strong hydrophobicity	90	0.3	1-5	1 × 5 mL	2045-1133
Chrom-Trap® Phenyl Chromstar® 6FF (LS) 1 mL	7.7/25	Low degree of ligand substitution Strong hydrophobicity	90	0.3	1	1 × 1 mL	2044-1131
Chrom-Screen™ Phenyl Chromstar® 6FF (LS) 4.7 mL	7.7/100	Low degree of ligand substitution Strong hydrophobicity	90	0.3	1-4.7	1 × 4.7 mL	2044-1132
Chrom-Trap® Phenyl Chromstar® 6FF (LS) 5 mL	16/25	Low degree of ligand substitution Strong hydrophobicity	90	0.3	1-5	1 × 5 mL	2044-1133
Chrom-Trap® Octyl Chromstar® 4FF 1 mL	7.7/25	Strong hydrophobicity	90	0.3	1	1 × 1 mL	2043-1121
Chrom-Screen™ Octyl Chromstar® 4FF 4.7 mL	7.7/100	Strong hydrophobicity	90	0.3	1-4.7	1 × 4.7 mL	2043-1122
Chrom-Trap® Octyl Chromstar® 4FF 5 mL	16/25	Strong hydrophobicity	90	0.3	1-5	1 × 5 mL	2043-1123
Chrom-Trap® Butyl Chromstar® 4FF 1 mL	7.7/25	Weak hydrophobicity	90	0.3	1	1 × 1 mL	2041-1121
Chrom-Screen™ Butyl Chromstar® 4FF 4.7 mL	7.7/100	Weak hydrophobicity	90	0.3	1-4.7	1 × 4.7 mL	2041-1122
Chrom-Trap® Butyl Chromstar® 4FF 5 mL	16/25	Weak hydrophobicity	90	0.3	1-5	1 × 5 mL	2041-1123
Chrom-Trap® Butyl-S Chromstar® 6FF 1 mL	7.7/25	Ultra-weak hydrophobicity	90	0.3	1	1 × 1 mL	2042-1131
Chrom-Screen™ Butyl-S Chromstar® 6FF 4.7 mL	7.7/100	Ultra-weak hydrophobicity	90	0.3	1-4.7	1 × 4.7 mL	2042-1132
Chrom-Trap® Butyl-S Chromstar® 6FF 5 mL	16/25	Ultra-weak hydrophobicity	90	0.3	1-5	1 × 5 mL	2042-1133

Chromstar® FF chromatography resin

Product	Feature	Mean particle size (µm)	Max. back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
Phenyl Chromstar® 6FF (HS)	High degree of ligand substitution Ultra-strong hydrophobicity	90	0.3	400	25 mL	1045-1131
					100 mL	1045-1132
					500 mL	1045-1133
					1 L	1045-1134
					5 L	1045-1135
					10 L	1045-1136
					20 L	1045-1137
Phenyl Chromstar® 6FF (LS)	Low degree of ligand substitution Strong hydrophobicity	90	0.3	400	25 mL	1044-1131
					100 mL	1044-1132
					500 mL	1044-1133
					1 L	1044-1134
					5 L	1044-1135
					10 L	1044-1136
					20 L	1044-1137
Octyl Chromstar® 4FF	Strong hydrophobicity	90	0.3	400	25 mL	1043-1121
					100 mL	1043-1122
					500 mL	1043-1123
					1 L	1043-1124
					5 L	1043-1125
					10 L	1043-1126
Butyl Chromstar® 4FF	Weak hydrophobicity	90	0.3	400	20 L	1043-1127
					25 mL	1041-1121
					100 mL	1041-1122
					500 mL	1041-1123
					1 L	1041-1124
					5 L	1041-1125
Butyl-S Chromstar® 6FF	Ultra-weak hydrophobicity	90	0.3	400	10 L	1041-1126
					20 L	1041-1127
					25 mL	1042-1131
					100 mL	1042-1132
					500 mL	1042-1133
					1 L	1042-1134
					5 L	1042-1135
					10 L	1042-1136
					20 L	1042-1137

Chromstar® HP

- Chromatography resin based on an improved agarose-based matrix
- With resistance to high-concentration salt, wide pH range, and organic solvents, and with good chemical stability

Chromstar® HP prepacked column

Product	Inner diameter x Column bed (mm)	Feature	Mean particle size (µm)	Max.back pressure (MPa)	Recommended flow velocity (mL/min)	Quantity	Product code
Chrom-Trap® Phenyl Chromstar® HP 1 mL	7.7/25	Ultra-strong hydrophobicity	34	0.3	1	1 x 1 mL	2045-1111
Chrom-Screen™ Phenyl Chromstar® HP 4.7 mL	7.7/100	Ultra-strong hydrophobicity	34	0.3	1-4.7	1 x 4.7 mL	2045-1112
Chrom-Trap® Phenyl Chromstar® HP 5 mL	16/25	Ultra-strong hydrophobicity	34	0.3	1-5	1 x 5 mL	2045-1113
Chrom-Trap® Butyl Chromstar® HP 1 mL	7.7/25	Week hydrophobicity	34	0.3	1	1 x 1 mL	2041-1111
Chrom-Screen™ Butyl Chromstar® HP 4.7 mL	7.7/100	Week hydrophobicity	34	0.3	1-4.7	1 x 4.7 mL	2041-1112
Chrom-Trap® Butyl Chromstar® HP 5 mL	16/25	Week hydrophobicity	34	0.3	1-5	1 x 5 mL	2041-1113

Chromstar® HP chromatography resin

Product	Feature	Mean particle size (µm)	Max.back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
Phenyl Chromstar® HP	Ultra-strong hydrophobicity	34	0.3	200	25 mL	1045-1111
					100 mL	1045-1112
					500 mL	1045-1113
					1 L	1045-1114
					5 L	1045-1115
					10 L	1045-1116
					20 L	1045-1117
Butyl Chromstar® HP	Week hydrophobicity	34	0.3	200	25 mL	1041-1111
					100 mL	1041-1112
					500 mL	1041-1113
					1 L	1041-1114
					5 L	1041-1115
					10 L	1041-1116
					20 L	1041-1117

Multimodal Chromatography

MaXtar® COLL 700 is a multimodal chromatography resin. Different from traditional chromatography resins, MaXtar® COLL 700 consists of two layers of different structures. Its outer shell is a porous passivation layer to ensure that macromolecules above 700 kD would not enter the pores but flow directly through the outer water instead. Its core is a spherical inner core coupled with a ligand of both hydrophobic and positive charge adsorption functions, which helps to maximize the binding of impurities such as host proteins and nucleic acids. It is suitable for the separation and purification of various macromolecular biological samples, such as viruses and virus-like particles.

MaXtar® COLL 700 provides superior performance over traditional single-modal chromatography resins:

- (1) The unique double-layer structure design helps to process macromolecules above 700 KD in flow-through mode, making process optimization easier and linear scale-up more convenient.
- (2) The improved MaXtar® matrix has excellent rigidity. This helps to achieve higher process flow velocity under low back pressure, improving process efficiency.
- (3) Compared with traditional size exclusion chromatography resins, MaXtar® COLL 700 has a larger loading amount, which helps to reduce costs.



MaXtar® MMC

- High-flow velocity chromatography resin based on an improved agarose-based matrix
- With wide range resistance and good chemical stability
- Various optional ligands available, presenting the combined separation effect of multiple chromatography principles

MaXtar® MMC prepacked column

Product	Inner diameter × Column bed (mm)	Feature	Mean particle size (µm)	Max.back pressure (MPa)	Recommended flow velocity (mL/min)	Quantity	Product code
Chrom-Trap® MaXtar® MMC 1 mL	7.7/25	Under high-salt conditions: Strong binding force High binding capacity	75	0.5	1	1 × 1 mL	2061-1821
Chrom-Screen™ MaXtar® MMC 4.7 mL	7.7/100	Under high-salt conditions: Strong binding force High binding capacity	75	0.5	1-4.7	1 × 4.7 mL	2061-1822
Chrom-Trap® MaXtar® MMC 5 mL	16/25	Under high-salt conditions: Strong binding force High binding capacity	75	0.5	1-5	1 × 5 mL	2061-1823
Chrom-Trap® MaXtar® MMC HR 1 mL	7.7/25	Under high-salt conditions: Strong binding force High binding capacity Good resolution	40	0.5	1	1 × 1 mL	2061-1811
Chrom-Screen™ MaXtar® MMC HR 4.7 mL	7.7/100	Under high-salt conditions: Strong binding force High binding capacity Good resolution	40	0.5	1-4.7	1 × 4.7 mL	2061-1812
Chrom-Trap® MaXtar® MMC HR 5 mL	16/25	Under high-salt conditions: Strong binding force High binding capacity Good resolution	40	0.5	1-5	1 × 5 mL	2061-1813

MaXtar® MMC chromatography resin

Product	Feature	Mean particle size (µm)	Max.back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
MaXtar® MMC	Under high-salt conditions: Strong binding force High binding capacity	75	0.5	600	25 mL	1061-1821
					100 mL	1061-1822
					500 mL	1061-1823
					1 L	1061-1824
					5 L	1061-1825
					10 L	1061-1826
					20 L	1061-1827
MaXtar® MMC HR	Under high-salt conditions: Strong binding force High binding capacity Good resolution	40	0.5	600	25 mL	1061-1811
					100 mL	1061-1812
					500 mL	1061-1813
					1 L	1061-1814
					5 L	1061-1815
					10 L	1061-1816
					20 L	1061-1817

MaXtar® COLL

- With a 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
- With wide range resistance and good chemical stability
- Suitable for the separation of viruses and other large biomolecules

MaXtar® COLL prepacked column

Product	Inner diameter × Column bed (mm)	Molecular cut off	Mean particle size (µm)	Max.back pressure (MPa)	Recommended flow velocity (mL/min)	Quantity	Product code
Chrom-Trap® MaXtar® COLL 700 1 mL	7.7/25	700 KD	90	0.5	1	1 × 1 mL	2063-1821
Chrom-Screen™ MaXtar® COLL 700 4.7 mL	7.7/100	700 KD	90	0.5	1-4.7	1 × 4.7 mL	2063-1822
Chrom-Trap® MaXtar® COLL 700 5 mL	16/25	700 KD	90	0.5	1-5	1 × 5 mL	2063-1823
Chrom-Trap® MaXtar® COLL 400 1 mL	7.7/25	400 KD	90	0.5	1	1 × 1 mL	2064-1821
Chrom-Screen™ MaXtar® COLL 400 4.7 mL	7.7/100	400 KD	90	0.5	1-4.7	1 × 4.7 mL	2064-1822
Chrom-Trap® MaXtar® COLL 400 5 mL	16/25	400 KD	90	0.5	1-5	1 × 5 mL	2064-1823

MaXtar® COLL chromatography resin

Product	Molecular cut off	Mean particle size (µm)	Max.back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
MaXtar® COLL 700	700 KD	90	0.5	500	25 mL	1063-1821
					100 mL	1063-1822
					500 mL	1063-1823
					1 L	1063-1824
					5 L	1063-1825
					10 L	1063-1826
					20 L	1063-1827
MaXtar® COLL 400	400 KD	90	0.5	700	25 mL	1064-1821
					100 mL	1064-1822
					500 mL	1064-1823
					1 L	1064-1824
					5 L	1064-1825
					10 L	1064-1826
					20 L	1064-1827

MaXtar® MMA

- High-flow velocity chromatography resin based on an improved agarose-based matrix
- With wide range resistance and good chemical stability
- Composed of multiple groups with different properties: amino groups, hydrogen bonds, and hydrophobic groups

MaXtar® MMA prepacked column

Product	Inner diameter × Column bed (mm)	Feature	Mean particle size (μm)	Max.back pressure (MPa)	Recommended flow velocity (mL/min)	Quantity	Product code
Chrom-Trap® MaXtar® MMA 1 mL	7.7/25	High flow velocity High binding capacity	75	0.5	1	1 × 1 mL	2062-1821
Chrom-Screen™ MaXtar® MMA 4.7 mL	7.7/100	High flow velocity High binding capacity	75	0.5	1-4.7	1 × 4.7 mL	2062-1822
Chrom-Trap® MaXtar® MMA 5 mL	16/25	High flow velocity High binding capacity	75	0.5	1-5	1 × 5 mL	2062-1823
Chrom-Trap® MaXtar® MMA HR 1 mL	7.7/25	High flow velocity High binding capacity High resolution	40	0.5	1	1 × 1 mL	2062-1811
Chrom-Screen™ MaXtar® MMA HR 4.7 mL	7.7/100	High flow velocity High binding capacity High resolution	40	0.5	1-4.7	1 × 4.7 mL	2062-1812
Chrom-Trap® MaXtar® MMA HR 5 mL	16/25	High flow velocity High binding capacity High resolution	40	0.5	1-5	1 × 5 mL	2062-1813

MaXtar® MMA chromatography resin

Product	Feature	Mean particle size (μm)	Max.back pressure (MPa)	Max. flow velocity (cm/h)	Quantity	Product code
MaXtar® MMA	High flow velocity High binding capacity	75	0.5	600	25 mL	1062-1821
					100 mL	1062-1822
					500 mL	1062-1823
					1 L	1062-1824
					5 L	1062-1825
					10 L	1062-1826
					20 L	1062-1827
MaXtar® MMA HR	High flow velocity High binding capacity High resolution	40	0.5	600	25 mL	1062-1811
					100 mL	1062-1812
					500 mL	1062-1813
					1 L	1062-1814
					5 L	1062-1815
					10 L	1062-1816
					20 L	1062-1817

Hydroxyapatite

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

Hydroxyapatite prepacked column

Product	Inner diameter × Column bed (mm)	Mean particle size (μm)	Max.back pressure (MPa)	Recommended flow velocity (mL/min)	Quantity	Product code
Chrom-Trap® BaronCHT® type I, 40 μm 1 mL	7.7/25	40	3	1	1 × 1 mL	2010-1121
Chrom-Screen™ BaronCHT® type I, 40 μm 4.7 mL	7.7/100	40	3	1-4.7	1 × 4.7 mL	2010-1122
Chrom-Trap® BaronCHT® type I, 40 μm 5 mL	16/25	40	3	1-5	1 × 5 mL	2010-1123
Chrom-Trap® BaronCHT® type II, 40 μm 1 mL	7.7/25	40	4	1	1 × 1 mL	2011-1121
Chrom-Screen™ BaronCHT® type II, 40 μm 4.7 mL	7.7/100	40	4	1-4.7	1 × 4.7 mL	2011-1122
Chrom-Trap® BaronCHT® type II, 40 μm 5 mL	16/25	40	4	1-5	1 × 5 mL	2011-1123

Hydroxyapatite chromatography resin

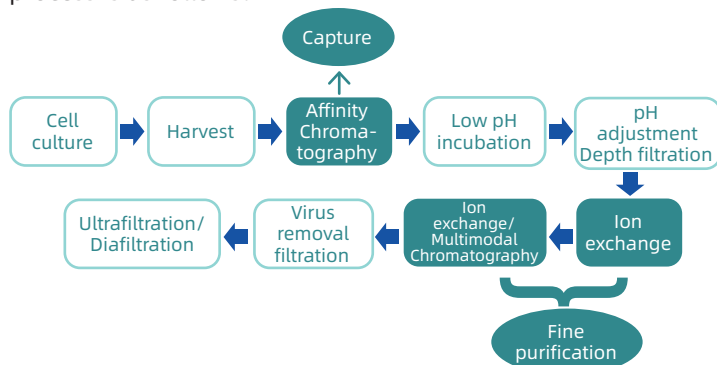
Product	Max.back pressure (MPa)	Max. flow velocity (cm/h)	Mean particle size (μm)	Quantity	Product code
BaronCHT® type I	3	400	20 μm	10 g	1110-1111
				25 g	1110-1112
				100 g	1110-1113
				1 kg	1110-1114
				5 kg	1110-1115
			40 μm	10 g	1110-1121
				25 g	1110-1122
				100 g	1110-1123
				1 kg	1110-1124
				5 kg	1110-1125
			60 μm	10 g	1110-1131
				25 g	1110-1132
				100 g	1110-1133
				1 kg	1110-1134
				5 kg	1110-1135
80 μm	10 g	1110-1141			
	25 g	1110-1142			
	100 g	1110-1143			
	1 kg	1110-1144			
	5 kg	1110-1145			

Product	Max.back pressure (MPa)	Max. flow velocity (cm/h)	Mean particle size (μm)	Quantity	Product code
BaronCHT® type II	4	400	20 μm	10 g	1111-1111
				25 g	1111-1112
				100 g	1111-1113
				1 kg	1111-1114
				5 kg	1111-1115
			40 μm	10 g	1111-1121
				25 g	1111-1122
				100 g	1111-1123
				1 kg	1111-1124
				5 kg	1111-1125
			60 μm	10 g	1111-1131
				25 g	1111-1132
				100 g	1111-1133
				1 kg	1111-1134
				5 kg	1111-1135
80 μm	10 g	1111-1141			
	25 g	1111-1142			
	100 g	1111-1143			
	1 kg	1111-1144			
	5 kg	1111-1145			

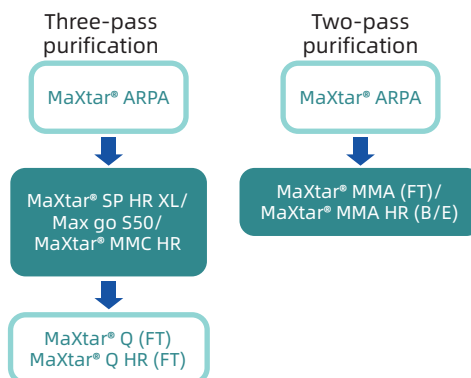
Chromatography Application

Antibodies

Antibodies, also called immunoglobulins, are a large group of proteins that specifically bind to antigens. Common therapeutic antibody drugs include monospecific antibodies, bispecific antibodies, and antibody-drug conjugates (ADCs). The flowchart of the antibody manufacturing process is as follows:

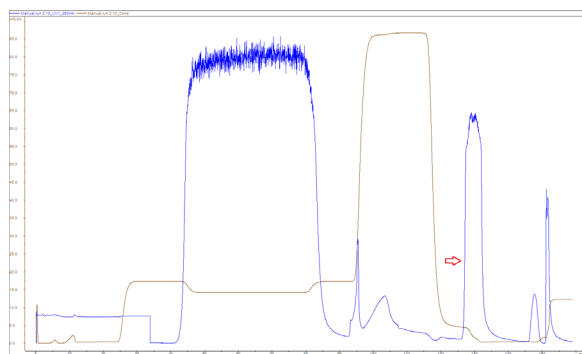


Antibody purification can be achieved using the three-pass procedure or two-pass procedure, including the capture of Protein A and 1-2 fine purification steps. BioLink offers the following solutions correspondingly:



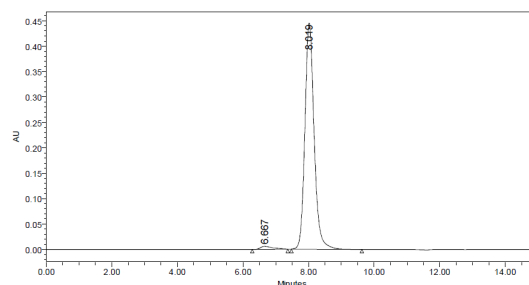
Application cases (monoclonal antibody):

Step 1 - Affinity chromatography: Use MaXtar® ARPA resin to capture monoclonal antibodies.



MaXtar® ARPA chromatography profile

Step 2 - Multimodal chromatography: Use MaXtar® MMA resin to remove polymers via the flow-through mode.



SEC-HPLC results of MaXtar® MMA-collected samples

Data summary of two-pass chromatography:

Chromatography step	Rec (%)	Monomer purity (%)
MaXtar® ARPA	99	96.35
MaXtar® MMA	90	98.27

Ordering information:

Product	Product code	Quantity
Chrom-Screen™ MaXtar® ARPA 4.7 mL	2024-1822	1 × 4.7 mL
Chrom-Screen™ MaXtar® SP HR 4.7 mL	2011-1812	1 × 4.7 mL
Chrom-Screen™ MaXtar® MMA 4.7 mL	2062-1822	1 × 4.7 mL
Chrom-Screen™ MaXtar® MMA HR 4.7 mL	2062-1812	1 × 4.7 mL
Chrom-Screen™ MaXtar® MMC HR 4.7 mL	2061-1812	1 × 4.7 mL
Chrom-Screen™ MaXtar® Q HR 4.7 mL	2014-1812	1 × 4.7 mL

Note: The bed height of the 4.7 mL prepacked column is 10 cm, which is suitable for process optimization and scale-up

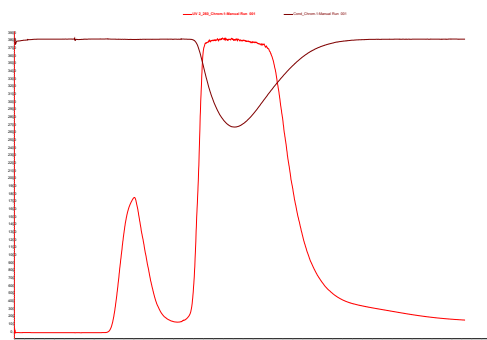


Plasmid

With the development of mRNA drugs, cell therapy, and gene therapy, plasmid DNA has been applied in a wide range of fields. It acts as the template for *in vitro* transcription in mRNA drug production. Also, it is a kind of nucleic acid drugs, or can be used as the raw material of virus packaging in the production of recombinant viral vectors.

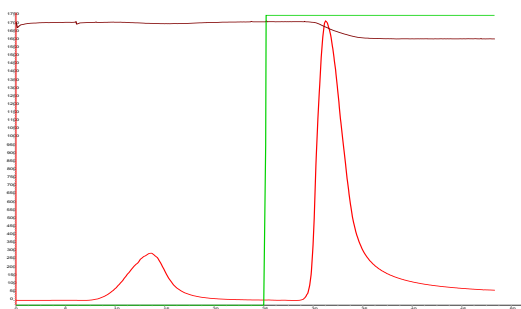
Application cases (plasmid):

Step 1 - Size exclusion chromatography: Use Chromstar® 6FF to remove RNA and exchange the buffer at the same time.



Chromstar® 6FF size exclusion chromatography profile

Step 2 - Affinity chromatography: Use MaXtar® PlasmidCap HR resin to specifically bind with supercoiled plasmids to allow the open circular plasmids to flow through, thus achieving the separation of supercoiled plasmids from open circular plasmids in a high-efficient manner.

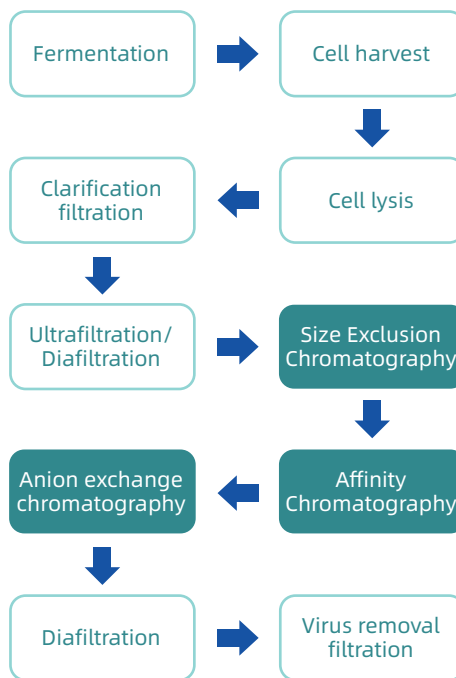


MaXtar® PlasmidCap HR affinity purification profile

Data summary of three-pass chromatography:

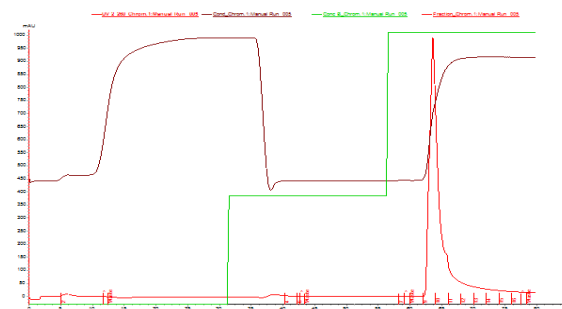
Chromatography step	Rec (%)*	Supercoiled plasmid purity (%)	HCD (%)	Endotoxin (EU/mg)
Chromstar® 6FF	95	88	NA	NA
MaXtar® PlasmidCap HR	92	96	0.20	NA
MaXtar® Q HR	85	98	0.10	< 5

* Calculated based on the supercoiled plasmid content



Flowchart of plasmid DNA manufacturing process

Step 3 - Anion exchange chromatography: Use MaXtar® Q HR for further purification to control the endotoxin level within the specified range for qualification.



MaXtar® Q HR anion purification profile

Ordering information:

Product	Product code	Quantity
Chromstar® 6FF	1010-1132	100 mL
Chrom-Screen™ MaXtar® PlasmidCap HR 4.7 mL	2031-1822	1 × 4.7 mL
Chrom-Screen™ MaXtar® Q HR 4.7 mL	2014-1812	1 × 4.7 mL

Note: The bed height of the 4.7 mL prepacked column is 10 cm, which is suitable for process optimization and scale-up

Viral vectors

Viral vectors are the delivery media commonly used in the field of cell therapy and gene therapy, and are getting more and more attention. Common viral vectors include adenovirus (AdV), adeno-associated virus (AAV), lentivirus (LV), and herpes simplex virus (HSV).

Taking AAV as an example, we recommend the purification strategy of the affinity resin MaXtar® AAV/Maxgo® AAV in combination with the ion exchange resin MaXtar® Q HR for the downstream purification. Where, MaXtar® AAV/Maxgo® AAV is a broad-spectrum affinity chromatography resin suitable for all AVV serum types.

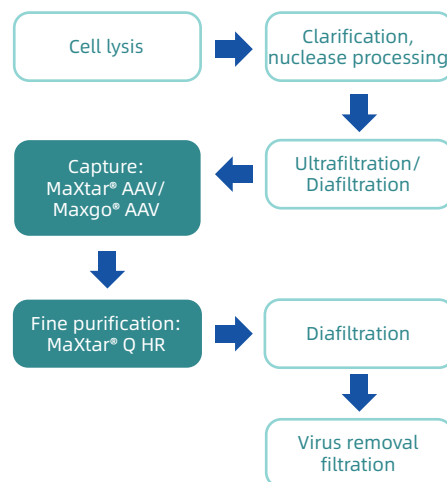
Also, for most viral vectors, the two-pass purification is applicable with the ion exchange resin MaXtar® Q HR in combination with the multimodal resin MaXtar® COLL 700/400.

Ordering information:

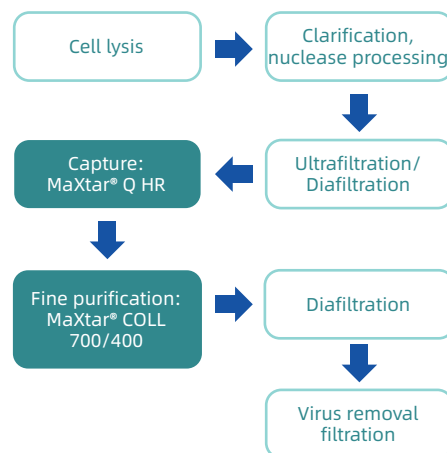
Product	Product code	Quantity
Chrom- Screen™ MaXtar® AAV 4.7 mL	2036-1822	1 × 4.7 mL
Chrom- Screen™ Max go AAV 4.7 mL	3036-1112	1 × 4.7 mL
Chrom-Screen™ MaXtar® COLL 400 4.7 mL	2064-1822	1 × 4.7 mL
Chrom-Screen™ MaXtar® COLL 700 4.7 mL	2063-1822	1 × 4.7 mL
Chrom-Screen™ MaXtar® Q HR 4.7 mL	2014-1812	1 × 4.7 mL

Note: The bed height of the 4.7 mL prepacked column is 10 cm, which is suitable for process optimization and scale-up

Flowchart of AAV manufacturing process



Flowchart of the manufacturing process of other viral vectors

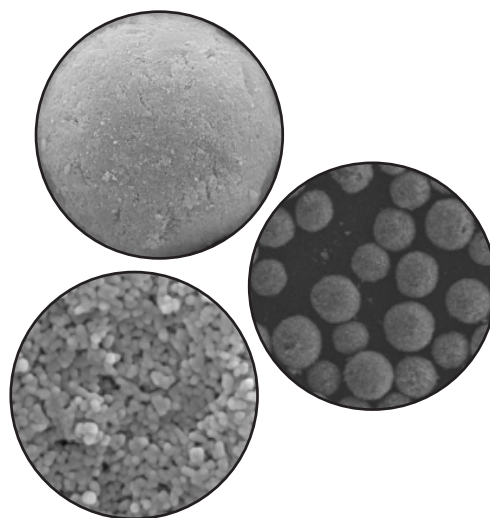


Polysaccharide (-Protein Conjugate) Vaccines

Polysaccharide-protein conjugate vaccine is prepared with the polysaccharides on the cell surface binding to the carrier proteins using chemical methods. Such vaccines include meningococcal polysaccharide-protein conjugate vaccines, pneumococcal polysaccharide-protein conjugate vaccines, and other vaccines.

For the purification of meningococcal polysaccharides, we recommend the serial connection of two chromatography resins, i.e., the multimodal resin MaXtar® MMA and the ion exchange resin MaXtar® DEAE, together with the desalting column Puredex® G-25 to exchange the buffer.

For the fine-purification of polysaccharides in the purification process of pneumococcal polysaccharides, we recommend the hydroxyapatite BaronCHT® in combination with the desalting column Puredex® G-25. Compared with the single-property resins, the multimodal hydroxyapatite BaronCHT® is an inorganic pure-phase chromatography resin with a stable spherical structure and uniformed particle sizes, applicable to multiple separation modes, including cation exchange, calcium affinity, and separation by hydroxyl groups. It is characterized by high flow velocity, high binding capacity, and good inter-batch repeatability, suitable for commercialized scale-up production.

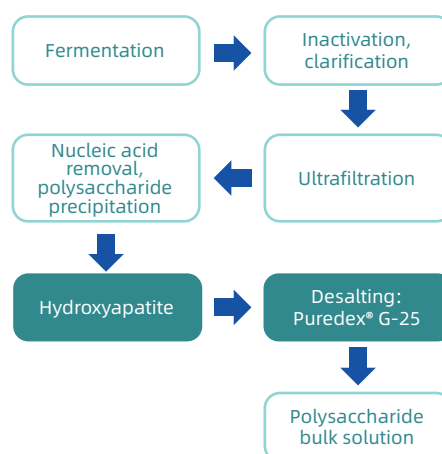


Spherical appearance and typical crystal structure of hydroxyapatite

Ordering information:

Product	Product code	Quantity
Chrom-Screen™ MaXtar® MMA 4.7 mL	2062-1822	1 × 4.7 mL
Chrom-Screen™ MaXtar® DEAE 4.7 mL	2015-1822	1 × 4.7 mL
Chrom-Screen™ BaronCHT® type I, 40 µm 4.7 mL	2010-1122	1 × 4.7 mL
Chrom-Screen™ BaronCHT® type II, 40 µm 4.7 mL	2011-1122	1 × 4.7 mL
Chrom-Trap® Puredex® G-25SF 5 mL	2050-2123	1 × 5 mL

Note: The bed height of the 4.7 mL prepacked column is 10 cm, which is suitable for process optimization and scale-up



Flowchart of pneumococcal polysaccharide manufacturing process



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About BioLink

BioLink is a group of technology-driven businesses that provide process solutions in the life sciences industry. The company focuses on the development and production of the key processing equipment and consumables used in the manufacturing process of recombinant protein drugs, vaccines, antibodies, cell therapies, gene therapies, and other biological products. BioLink's portfolio of offerings covers the entire upstream and downstream bioprocess such as cell culture, single-use mixing and storage, chromatography, filtration (ultrafiltration/diafiltration, clarification, and virus removal), and hydration products, as well as process development services. BioLink is committed to providing customers with high-quality, innovative products and solutions and strives to build an efficient, safe and competitive biopharmaceutical supply chain eco-system.

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