

CIMmultus[®] Monolithic Columns

Pre-Packed Preparative
Columns for Purification
of Large Biomolecules



Portfolio Overview

CIMmultus[®] is a unique line of ready-to-use monolithic columns distinguished by wide flow-through channels and designed for fast and gentle purification of large biomolecules. CIMmultus[®] columns can be used as single-use disposable or multiuse columns. The polymethacrylate monolith is housed in reinforced epoxy thermoset materials coated in USP Class VI Parylene C. This gives CIMmultus[®] columns the structural strength of stainless steel and ensures extractables and leachables-free processing. CIMmultus[®] columns are cGMP compliant. Scalable from 1 mL to 40 L, CIMmultus[®] columns are available with 1.3 μm , 2 μm , and 6 μm channels, and a broad range of chemistries.

Key Benefits

- Rapid, gentle, high-capacity, and high-resolution purification of large biomolecules
- Designed for processing of viruses, viral vectors, pDNA, mRNA, bacteriophages, exosomes, and VLPs
- Available with 10 different chemistries
- Scalable from 1 mL to 40 L
- Single batch use or multiuse
- cGMP compliant

Features | Benefits

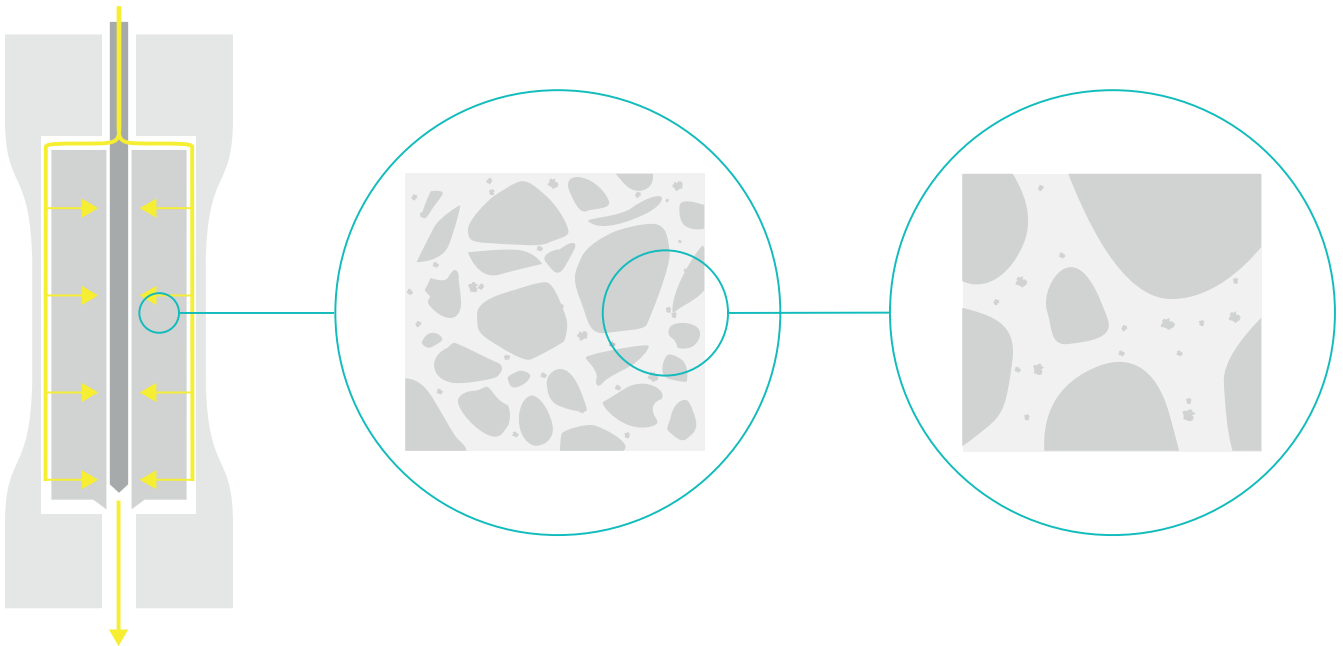
CIMmultus® Feature	Benefit
No turbulent mixing	High resolution
Laminar flow, low shear environment	Gentle processing and high recovery
Wide uniform channels, highly accessible binding sites	High capacity for large biomolecules
Convective mass transport	<ul style="list-style-type: none">▪ Flow-rate independent capacity and resolution - higher productivity, reduced processing time▪ Easy scale-up▪ Minimal peak broadening, excellent resolution
High porosity	Low pressure drop, high flow rates



Relevant Applications

CIMmultus® columns are used for the preparative purification of large biomolecules:

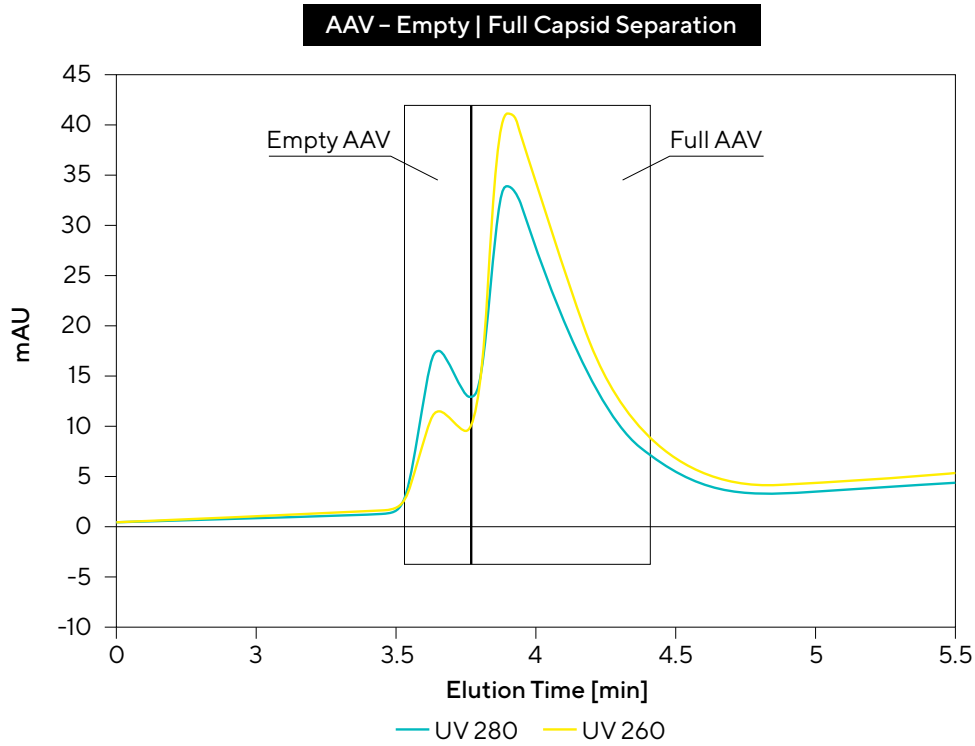
- Viruses
- Viral vectors
- pDNA
- mRNA
- Exosomes
- Bacteriophages
- VLPs
- Large proteins, > 200 kDa, such as IgM or PEGylated proteins



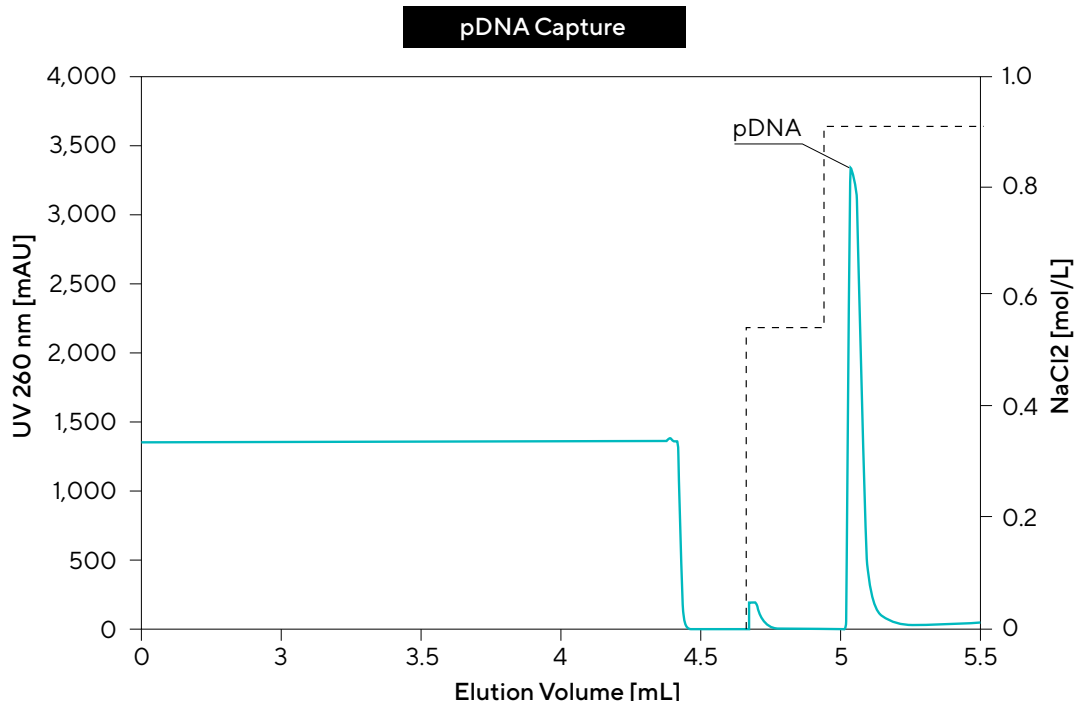
Monolithic Chromatography Across Multiple Applications

AAV	mRNA	pDNA	Exosomes
CIMmultus® OH	CIMmultus® Oligo dT	CIMmultus® DEAE	CIMmultus® EV
CIMmultus® SO3	CIMmultus® Prima S	CIMmultus® C4 HLD	Cornerstone® Exosome Process Development Pack
CIMmultus® QA	CIMmultus® C4 HLD	HiP2 Plasmid Process Pack	

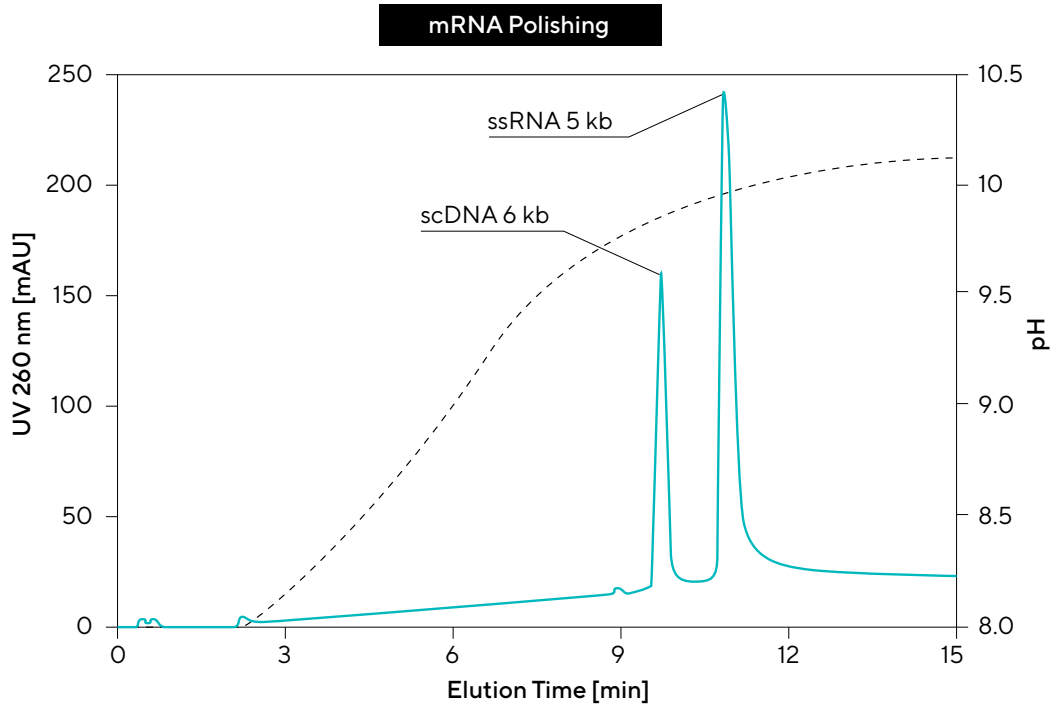
Application Examples



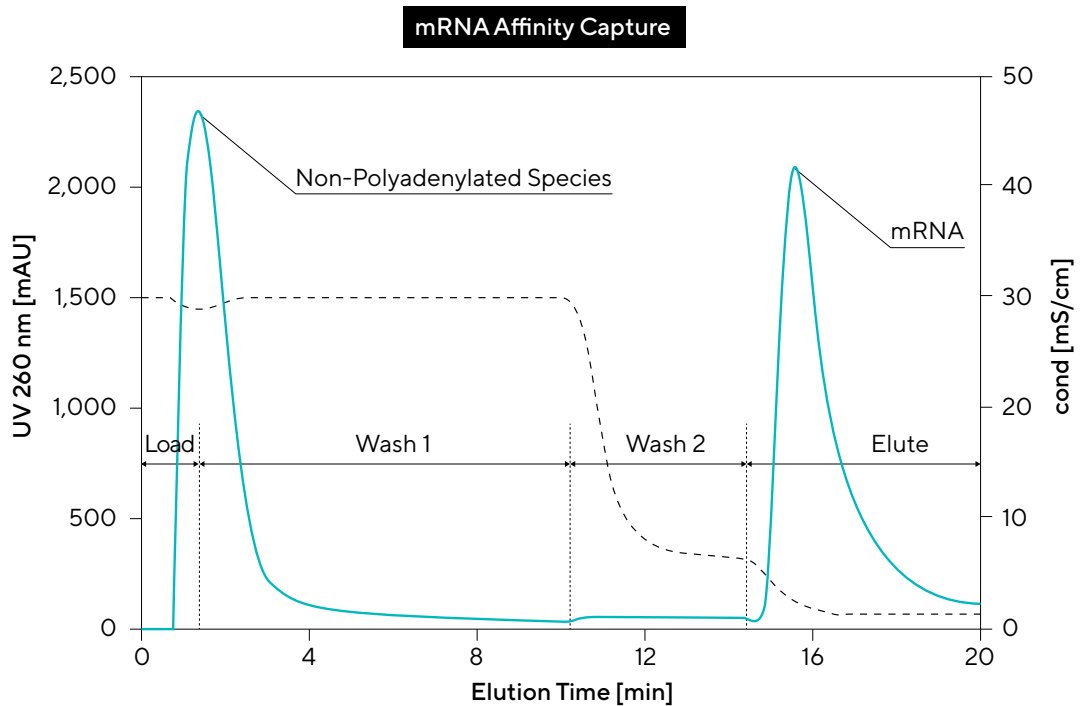
Final polishing and removal of empty AAV capsids is conducted on a CIMmultus® QA anion exchange monolith in a salt gradient at alkaline pH.



Plasmid DNA is captured on CIMmultus® DEAE, a weak anion exchange column, where remaining RNA and proteins are removed. Sample binding requires low conductivity, achieved by dilution. Elution with increasing NaCl steps elutes RNA first, followed by elution of plasmid DNA.



CIMmultus® PrimaS purifies large single-stranded mRNA (ssRNA) under aqueous conditions at ambient temperature. It can be used for polishing or as high resolution capture method. It removes dsRNA, DNA, proteins, and endotoxins while fractionating ssRNA in order of increasing size.



CIMmultus® Oligo dT provides a single-step affinity capture of mRNA. Binding occurs through hydrogen bonding, with the oligo dT forming a stable hybrid association with the terminal poly(A) sequence of the target. Non-RNA contaminants flow through the column during sample loading.

Relevant Process Steps

CIMmultus® monoliths are employed for large biomolecule purification using multiple chemistries and across scales, from process development to production of materials for

- pre-clinical | tox studies
- clinical phases
- commercial production



CIMmultus® columns are used for both capture and polishing processing steps, primarily in bind-and elute mode.

A selection of CIMmultus® monoliths by chemistry:

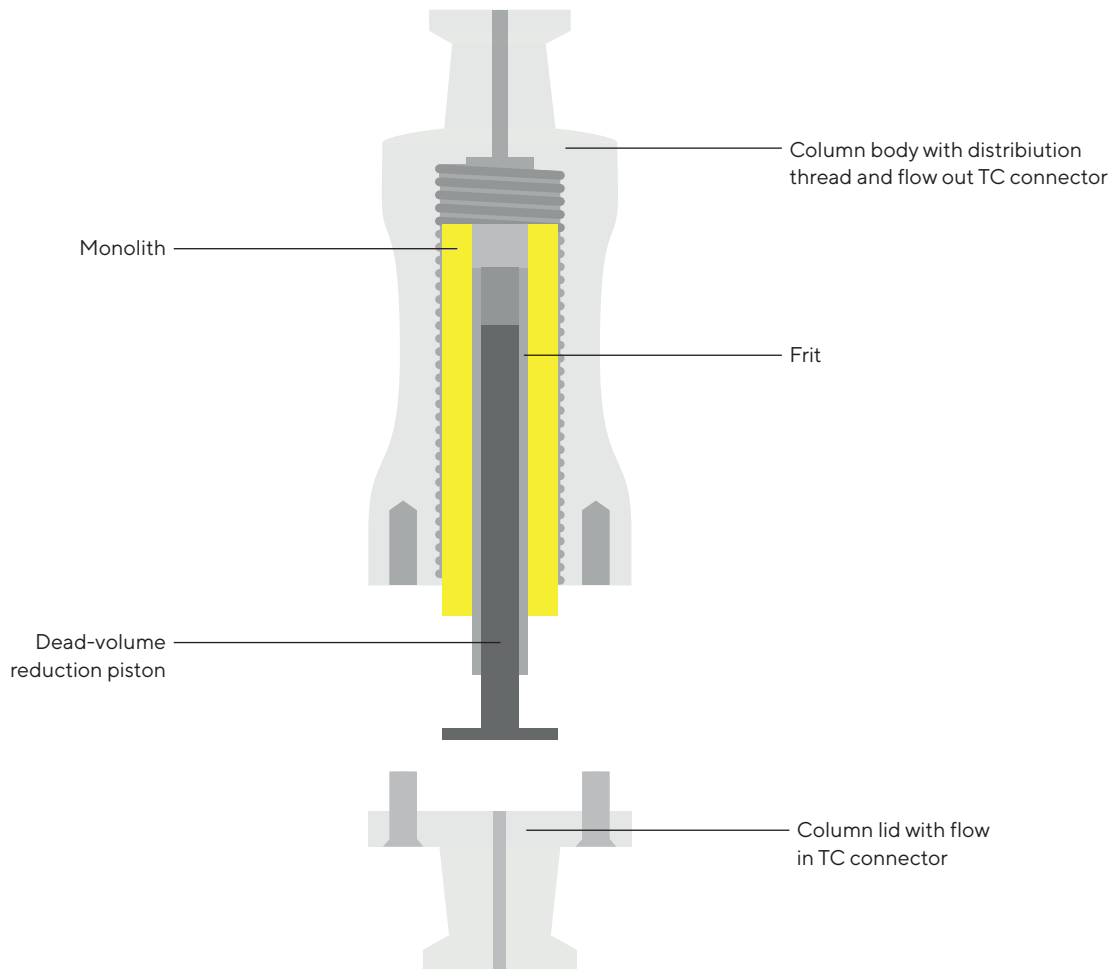
IEX	HIC	Affinity	Mixed-Mode
CIMmultus® QA	CIMmultus® OH	CIMmultus® Oligo dT	CIMmultus® PrimaS
CIMmultus® DEAE	CIMmultus® C4 HLD		CIMmultus® H-Bond
CIMmultus® EV			
CIMmultus® EDA			
CIMmultus® SO3			

Technical Specifications

CIMmultus® Columns

Stationary phase	highly cross-linked, porous and rigid monolith - polymethacrylate
Housing	epoxy thermoset composite, coated pin-hole free with USP Class VI Parylene C
Geometry	Radial
Max. operating flow rate	1 to 16 CV/min (depending on bed volume)
Max. pressure	1 mL: 18 bar; 4, 8, 40 and 80 mL: 20 bar; 400 and 800 mL: 14 bar; 4 and 8 L: 7 bar
Packing	Prepacked
Scalability	Streamlined from 1 mL to 40 L
Reusability	Multi-use or disposable

CIMmultus® Column Design



CIMmultus® for Hydrophobic Interaction Chromatography

	CIMmultus®OH	CIMmultus®C4 HLD
Channel sizes	1.3 2 6 µm	2 6 µm
Column volume	1 mL - 8 L	1 mL - 8 L
Working range, pH	2 - 10	2 - 10
Cleaning	1 M NaOH	1 M NaOH
Functionality	Weak hydrophobic	Strong hydrophobic
Typical application	Viruses, (e.g. AAV) and VLPs	Nucleic acids (pDNA, mRNA)
Feature	Often used in steric exclusion mode, large solutes retained in the presence of precipitating salts while small molecules and proteins flow through	Highly effective for removing proteins from nucleic acids

CIMmultus® for Ion Exchange Chromatography

	CIMmultus®SO3	CIMmultus®QA	CIMmultus®DEAE	CIMmultus®EDA	CIMmultus®EV
Channel sizes	1.3 2 6 µm	1.3 2 6 µm	1.3 2 6 µm	2 µm	2 µm
Column volume	1 mL–8 L	1 mL–8 L	1 mL–8 L	1 mL–8 L	1 mL–8 L
Working range, pH	2–13	2–13	2–9	2–9	2–13
Cleaning	1M NaOH + 2M NaCl	1M NaOH + 2M NaCl	1M NaOH + 2M NaCl	1M NaOH + 2M NaCl	1M NaOH + 2M NaCl
Functionality	Strong cation exchange	Strong anion exchange	Weak anion exchange	Weak anion exchange	Strong anion exchange
Typical application	Viruses, (e.g. AAV) and VLPs	Viruses, (e.g. AAV) and VLPs	pDNA	pDNA	Exosomes
Feature	High capacity for purification of viruses and VLPs	High efficiency removal of endotoxins and DNA; E F capsid separation	High capacity for pDNA	High capacity for pDNA	High efficiency removal of virus, endotoxins and non-exosomal vesicles

CIMmultus® for Affinity Purification

	Oligo dT
Channel sizes	2 µm
Column volume	1 mL–8 L
Working range, pH	2–13
Cleaning	3 M Guanidine-HCl, 5 mM EDTA, pH 7.0. (50–500 mM NaOH short term)
Functionality	Hybridization affinity with poly T ligand; C6 or C12 linker
Typical application	mRNA
Feature	Efficient capture of polyadenylated mRNA from various sources

CIMmultus® Mixed Mode Chromatography

	CIMmultus®PrimaS	CIMmultus®H-Bond ADC
Channel sizes	2 µm	1.3 2 µm
Column volume	1 mL–8 L	1 mL and 8 mL
Working range, pH	2–13	2–13
Cleaning	0.1 M NaOH + 1M NaCl	1 M NaOH + 2 M NaCl
Functionality	Hydrogen bonding and anion exchange	Viruses and extra-cellular vesicles; aggregate removal
Typical application	mRNA	Viruses and vesicles
Feature	Supports purification of single-stranded RNA at ambient temperature	Unique selectivity for size-based separation; large molecules retained more strongly; good for DNA removal

Process Packs support the development and scale-up of large molecule purification. They come with recommended CIMmultus® columns and detailed process instructions to achieve high-quality purification in a short time.

CIMmultus® Process Packs

	HiP2 Plasmid Process Pack®	Cornerstone® Exosome Process Development Pack
Column volume	1–8,000 mL	1 mL (larger on request)
Included chemistries	CIMmultus®DEAE CIMmultus®C4-HLD	CIMmultus®EV
Additional components	Detailed process instructions	Kryptonase DNase Detailed process instructions



Ordering Information

CIMmultus® Columns for IEX

Order Code	Description
311.5114-1.3	CIMmultus® DEAE 1 mL Monolithic Column (Diethylamino) (1.3 µm channels)
311.5114-2	CIMmultus® DEAE 1 mL Monolithic Column (Diethylamino) (2 µm channels)
311.5114-6	CIMmultus® DEAE 1 mL Monolithic Column (Diethylamino) (6 µm channels)
414.5114-2	CIMmultus® DEAE 4 mL Monolithic Column (Diethylamino) (2 µm channels)
411.5114-2	CIMmultus® DEAE 8 mL Monolithic Column (Diethylamino) (2 µm channels)
411.5114-6	CIMmultus® DEAE 8 mL Monolithic Column (Diethylamino) (6 µm channels)
614.5114-2	CIMmultus® DEAE 40 mL Monolithic Column (Diethylamino) (2 µm channels)
611.5114-1.3	CIMmultus® DEAE 80 mL Monolithic Column (Diethylamino) (1.3 µm channels)
611.5114-2	CIMmultus® DEAE 80 mL Monolithic Column (Diethylamino) (2 µm channels)
611.5114-6	CIMmultus® DEAE 80 mL Monolithic Column (Diethylamino) (6 µm channels)
814.5114-2	CIMmultus® DEAE 400 mL Monolithic Column (Diethylamino) (2 µm channels)
811.5114-2	CIMmultus® DEAE 800 mL Monolithic Column (Diethylamino) (2 µm channels)
811.5114-6	CIMmultus® DEAE 800 mL Monolithic Column (Diethylamino) (6 µm channels)
1014.5114-2	CIMmultus® DEAE 4,000 mL Monolithic Column (Diethylamino) (2 µm channels)
1011.5114-2	CIMmultus® DEAE 8,000 mL Monolithic Column (Diethylamino) (2 µm channels)
901.5114-2	CIMmultus® DEAE 8 mL cGMP Compliant Monolithic Column (Diethylamino) (2 µm channels)
914.5114-2	CIMmultus® DEAE 40 mL cGMP Compliant Monolithic Column (Diethylamino) (2 µm channels)
911.5114-1.3	CIMmultus® DEAE 80 mL cGMP Compliant Monolithic Column (Diethylamino) (1.3 µm channels)
911.5114-2	CIMmultus® DEAE 80 mL cGMP Compliant Monolithic Column (Diethylamino) (2 µm channels)
911.5114-6	CIMmultus® DEAE 80 mL cGMP Compliant Monolithic Column (Diethylamino) (6 µm channels)
924.5114-2	CIMmultus® DEAE 400 mL cGMP Compliant Monolithic Column (Diethylamino) (2 µm channels)
921.5114-2	CIMmultus® DEAE 800 mL cGMP Compliant Monolithic Column (Diethylamino) (2 µm channels)
921.5114-6	CIMmultus® DEAE 800 mL cGMP Compliant Monolithic Column (Diethylamino) (6 µm channels)
934.5114-2	CIMmultus® DEAE 4,000 mL cGMP Compliant Monolithic Column (Diethylamino) (2 µm channels)
931.5114-2	CIMmultus® DEAE 8,000 mL cGMP Compliant Monolithic Column (Diethylamino) (2 µm channels)
931.5114-6	CIMmultus® DEAE 8,000 mL cGMP Compliant Monolithic Column (Diethylamino) (6 µm channels)
311.5120-2	CIMmultus® EV (strong anion exchange) 1 mL Monolithic Column (2 µm channels)

Order Code	Description
311.5113-1.3	CIMmultus® QA 1 mL Monolithic Column (Quaternary Amine) (1.3 µm channels)
311.5113-2	CIMmultus® QA 1 mL Monolithic Column (Quaternary Amine) (2 µm channels)
311.5113-6	CIMmultus® QA 1 mL Monolithic Column (Quaternary Amine) (6 µm channels)
414.5113-2	CIMmultus® QA 4 mL Monolithic Column (Quaternary Amine) (2 µm channels)
414.5113-6	CIMmultus® QA 4 mL Monolithic Column (Quaternary Amine) (6 µm channels)
411.5113-2	CIMmultus® QA 8 mL Monolithic Column (Quaternary Amine) (2 µm channels)
411.5113-6	CIMmultus® QA 8 mL Monolithic Column (Quaternary Amine) (6 µm channels)
614.5113-2	CIMmultus® QA 40 mL Monolithic Column (Quaternary Amine) (2 µm channels)
614.5113-6	CIMmultus® QA 40 mL Monolithic Column (Quaternary Amine) (6 µm channels)
611.5113-1.3	CIMmultus® QA 80 mL Monolithic Column (Quaternary Amine) (1.3 µm channels)
611.5113-2	CIMmultus® QA 80 mL Monolithic Column (Quaternary Amine) (2 µm channels)
611.5113-6	CIMmultus® QA 80 mL Monolithic Column (Quaternary Amine) (6 µm channels)
814.5113-2	CIMmultus® QA 400 mL Monolithic Column (Quaternary Amine) (2 µm channels)
811.5113-1.3	CIMmultus® QA 800 mL Monolithic Column (Quaternary Amine) (1.3 µm channels)
811.5113-2	CIMmultus® QA 800 mL Monolithic Column (Quaternary Amine) (2 µm channels)
811.5113-6	CIMmultus® QA 800 mL Monolithic Column (Quaternary Amine) (6 µm channels)
1014.5113-2	CIMmultus® QA 4,000 mL Monolithic Column (Quaternary Amine) (2 µm channels)
1011.5113-1.3	CIMmultus® QA 8,000 mL Monolithic Column (Quaternary Amine) (1.3 µm channels)
1011.5113-2	CIMmultus® QA 8,000 mL Monolithic Column (Quaternary Amine) (2 µm channels)
1011.5113-6	CIMmultus® QA 8,000 mL Monolithic Column (Quaternary Amine) (6 µm channels)
904.5113-2	CIMmultus® QA 4 mL cGMP Compliant Monolithic Column (Quaternary Amine) (2 µm channels)
901.5113-2	CIMmultus® QA 8 mL cGMP Compliant Monolithic Column (Quaternary Amine) (2 µm channels)
914.5113-2	CIMmultus® QA 40 mL cGMP Compliant Monolithic Column (Quaternary Amine) (2 µm channels)
911.5113-1.3	CIMmultus® QA 80 mL cGMP Compliant Monolithic Column (Quaternary Amine) (1.3 µm channels)
911.5113-2	CIMmultus® QA 80 mL cGMP Compliant Monolithic Column (Quaternary Amine) (2 µm channels)
911.5113-6	CIMmultus® QA 80 mL cGMP Compliant Monolithic Column (Quaternary Amine) (6 µm channels)
924.5113-2	CIMmultus® QA 400 mL cGMP Compliant Monolithic Column (Quaternary Amine) (2 µm channels)
921.5113-1.3	CIMmultus® QA 800 mL cGMP Compliant Monolithic Column (Quaternary Amine) (1.3 µm channels)
921.5113-2	CIMmultus® QA 800 mL cGMP Compliant Monolithic Column (Quaternary Amine) (2 µm channels)
921.5113-6	CIMmultus® QA 800 mL cGMP Compliant Monolithic Column (Quaternary Amine) (6 µm channels)
934.5113-2	CIMmultus® QA 4,000 mL cGMP Compliant Monolithic Column (Quaternary Amine) (2 µm channels)
931.5113-1.3	CIMmultus® QA 8,000 mL cGMP Compliant Monolithic Column (Quaternary Amine) (1.3 µm channels)
931.5113-2	CIMmultus® QA 8,000 mL cGMP Compliant Monolithic Column (Quaternary Amine) (2 µm channels)
931.5113-6	CIMmultus® QA 8,000 mL cGMP Compliant Monolithic Column (Quaternary Amine) (6 µm channels)
346.0001-2	CIMmultus® 1 mL Purification Screening Kit (1× QA 311.5113-2, SO3 311.6157-2, OH 311.8140-2) (2 µm channels)

Order Code	Description
311.6157-2	CIMmultus® SO3 1 mL Monolithic Column (Sulfonate) (2 µm channels)
414.6157-2	CIMmultus® SO3 4 mL Monolithic Column (Sulfonate) (2 µm channels)
411.6157-2	CIMmultus® SO3 8 mL Monolithic Column (Sulfonate) (2 µm channels)
614.6157-2	CIMmultus® SO3 40 mL Monolithic Column (Sulfonate) (2 µm channels)
611.6157-2	CIMmultus® SO3 80 mL Monolithic Column (Sulfonate) (2 µm channels)
814.6157-2	CIMmultus® SO3 400 mL Monolithic Column (Sulfonate) (2 µm channels)
811.6157-2	CIMmultus® SO3 800 mL Monolithic Column (Sulfonate) (2 µm channels)
811.6157-6	CIMmultus® SO3 800 mL Monolithic Column (Sulfonate) (6 µm channels)
1014.6157-2	CIMmultus® SO3 4,000 mL Monolithic Column (Sulfonate) (2 µm channels)
1011.6157-2	CIMmultus® SO3 8,000 mL Monolithic Column (Sulfonate) (2 µm channels)
904.6157-2	CIMmultus® SO3 4 mL cGMP Compliant Monolithic Column (Sulfonate) (2 µm channels)
901.6157-2	CIMmultus® SO3 8 mL cGMP Compliant Monolithic Column (Sulfonate) (2 µm channels)
914.6157-2	CIMmultus® SO3 40 mL cGMP Compliant Monolithic Column (Sulfonate) (2 µm channels)
911.6157-2	CIMmultus® SO3 80 mL cGMP Compliant Monolithic Column (Sulfonate) (2 µm channels)
911.6157-6	CIMmultus® SO3 80 mL cGMP Compliant Monolithic Column (Sulfonate) (6 µm channels)
924.6157-2	CIMmultus® SO3 400 mL cGMP Compliant Monolithic Column (Sulfonate) (2 µm channels)
924.6157-6	CIMmultus® SO3 400 mL cGMP Compliant Monolithic Column (Sulfonate) (6 µm channels)
921.6157-2	CIMmultus® SO3 800 mL cGMP Compliant Monolithic Column (Sulfonate) (2 µm channels)
934.6157-2	CIMmultus® SO3 4,000 mL cGMP Compliant Monolithic Column (Sulfonate) (2 µm channels)
931.6157-2	CIMmultus® SO3 8,000 mL cGMP Compliant Monolithic Column (Sulfonate) (2 µm channels)
346.0001-2	CIMmultus® 1 mL Purification Screening Kit (1× QA 311.5113-2, SO3 311.6157-2, OH 311.8140-2) (2 µm channels)

CIMmultus® Columns for HIC

Order Code	Description
414.8136-2	CIMmultus® C4 HLD 4 mL Monolithic Column (HLD Butyl) (2 µm channels)
411.8136-2	CIMmultus® C4 HLD 8 mL Monolithic Column (HLD Butyl) (2 µm channels)
614.8136-2	CIMmultus® C4 HLD 40 mL Monolithic Column (HLD Butyl) (2 µm channels)
611.8136-2	CIMmultus® C4 HLD 80 mL Monolithic Column (HLD Butyl) (2 µm channels)
814.8136-2	CIMmultus® C4 HLD 400 mL Monolithic Column (HLD Butyl) (2 µm channels)
811.8136-2	CIMmultus® C4 HLD 800 mL Monolithic Column (HLD Butyl) (2 µm channels)
1014.8136-2	CIMmultus® C4 HLD 4,000 mL Monolithic Column (HLD Butyl) (2 µm channels)
1011.8136-2	CIMmultus® C4 HLD 8,000 mL Monolithic Column (HLD Butyl) (2 µm channels)
901.8136-2	CIMmultus® C4 HLD 8 mL cGMP Compliant Monolithic Column (HLD Butyl) (2 µm channels)
914.8136-2	CIMmultus® C4 HLD 40 mL cGMP Compliant Monolithic Column (HLD Butyl) (2 µm channels)
911.8136-2	CIMmultus® C4 HLD 80 mL cGMP Compliant Monolithic Column (HLD Butyl) (2 µm channels)
924.8136-2	CIMmultus® C4 HLD 400 mL cGMP Compliant Monolithic Column (HLD Butyl) (2 µm channels)
921.8136-2	CIMmultus® C4 HLD 800 mL cGMP Compliant Monolithic Column (HLD Butyl) (2 µm channels)
934.8136-2	CIMmultus® C4 HLD 4,000 mL cGMP Compliant Monolithic Column (HLD Butyl) (2 µm channels)
931.8136-2	CIMmultus® C4 HLD 8,000 mL cGMP Compliant Monolithic Column (HLD Butyl) (2 µm channels)
311.8140-1.3	CIMmultus® OH 1 mL Monolithic Column (Hydroxyl) (1.3 µm channels)
311.8140-2	CIMmultus® OH 1 mL Monolithic Column (Hydroxyl) (2 µm channels)
311.8140-6	CIMmultus® OH 1 mL Monolithic Column (Hydroxyl) (6 µm channels)
414.8140-2	CIMmultus® OH 4 mL Monolithic Column (Hydroxyl) (2 µm channels)
411.8140-1.3	CIMmultus® OH 8 mL Monolithic Column (Hydroxyl) (1.3 µm channels)
411.8140-2	CIMmultus® OH 8 mL Monolithic Column (Hydroxyl) (2 µm channels)
411.8140-6	CIMmultus® OH 8 mL Monolithic Column (Hydroxyl) (6 µm channels)
614.8140-2	CIMmultus® OH 40 mL Monolithic Column (Hydroxyl) (2 µm channels)
611.8140-1.3	CIMmultus® OH 80 mL Monolithic Column (Hydroxyl) (1.3 µm channels)
611.8140-2	CIMmultus® OH 80 mL Monolithic Column (Hydroxyl) (2 µm channels)
814.8140-2	CIMmultus® OH 400 mL Monolithic Column (Hydroxyl) (2 µm channels)
811.8140-2	CIMmultus® OH 800 mL Monolithic Column (Hydroxyl) (2 µm channels)
914.8140-2	CIMmultus® OH 40 mL cGMP Compliant Monolithic Column (Hydroxyl) (2 µm channels)
911.8140-2	CIMmultus® OH 80 mL cGMP Compliant Monolithic Column (Hydroxyl) (2 µm channels)
924.8140-2	CIMmultus® OH 400 mL cGMP Compliant Monolithic Column (Hydroxyl) (2 µm channels)
921.8140-2	CIMmultus® OH 800 mL cGMP Compliant Monolithic Column (Hydroxyl) (2 µm channels)

CIMmultus® Columns for Affinity

Order Code	Description
311.1218-2	CIMmultus® Oligo dT18 1 mL Monolithic Column (C6 Linker) (2 µm channels)
311.1219-2	CIMmultus® Oligo dT18 1 mL Monolithic Column (C12 Linker) (2 µm channels)
414.1218-2	CIMmultus® Oligo dT18 4 mL Monolithic Column (C6 Linker) (2 µm channels)
414.1219-2	CIMmultus® Oligo dT18 4 mL Monolithic Column (C12 Linker) (2 µm channels)"
411.1218-2	CIMmultus® Oligo dT18 8 mL Monolithic Column (C6 Linker) (2 µm channels)
411.1219-2	CIMmultus® Oligo dT18 8 mL Monolithic Column (C12 Linker) (2 µm channels)
614.1218-2	CIMmultus® Oligo dT18 40 mL Monolithic Column (C6 Linker) (2 µm channels)
614.1219-2	CIMmultus® Oligo dT18 40 mL Monolithic Column (C12 Linker) (2 µm channels)
611.1218-2	CIMmultus® Oligo dT18 80 mL Monolithic Column (C6 Linker) (2 µm channels)
611.1219-2	CIMmultus® Oligo dT18 80 mL Monolithic Column (C12 Linker) (2 µm channels)
814.1218-2	CIMmultus® Oligo dT18 400 mL Monolithic Column (C6 Linker) (2 µm channels)
814.1219-2	CIMmultus® Oligo dT18 400 mL Monolithic Column (C12 Linker) (2 µm channels)
811.1218-2	CIMmultus® Oligo dT18 800 mL Monolithic Column (C6 Linker) (2 µm channels)
811.1219-2	CIMmultus® Oligo dT18 800 mL Monolithic Column (C12 Linker) (2 µm channels)
1014.1218-2	CIMmultus® Oligo dT18 4,000 mL Monolithic Column (C6 Linker) (2 µm channels)
1014.1219-2	CIMmultus® Oligo dT18 4,000 mL Monolithic Column (C12 Linker) (2 µm channels)
1011.1218-2	CIMmultus® Oligo dT18 8,000 mL Monolithic Column (C6 Linker) (2 µm channels)
1011.1219-2	CIMmultus® Oligo dT18 8,000 mL Monolithic Column (C12 Linker) (2 µm channels)
914.1218-2	CIMmultus® Oligo dT18 40 mL cGMP Compliant Monolithic Column (C6 Linker) (2 µm channels)
914.1219-2	CIMmultus® Oligo dT18 40 mL cGMP Compliant Monolithic Column (C12 Linker) (2 µm channels)
911.1218-2	CIMmultus® Oligo dT18 80 mL cGMP Compliant Monolithic Column (C6 Linker) (2 µm channels)
911.1219-2	CIMmultus® Oligo dT18 80 mL cGMP Compliant Monolithic Column (C12 Linker) (2 µm channels)
924.1218-2	CIMmultus® Oligo dT18 400 mL cGMP Compliant Monolithic Column (C6 Linker) (2 µm channels)
924.1219-2	CIMmultus® Oligo dT18 400 mL cGMP Compliant Monolithic Column (C12 Linker) (2 µm channels)
921.1218-2	CIMmultus® Oligo dT18 800 mL cGMP Compliant Monolithic Column (C6 Linker) (2 µm channels)
921.1219-2	CIMmultus® Oligo dT18 800 mL cGMP Compliant Monolithic Column (C12 Linker) (2 µm channels)
934.1218-2	CIMmultus® Oligo dT18 4,000 mL cGMP Compliant Monolithic Column (C6 Linker) (2 µm channels)
934.1219-2	CIMmultus® Oligo dT18 4,000 mL cGMP Compliant Monolithic Column (C12 Linker) (2 µm channels)
931.1218-2	CIMmultus® Oligo dT18 8,000 mL cGMP Compliant Monolithic Column (C6 Linker) (2 µm channels)
931.1219-2	CIMmultus® Oligo dT18 8,000 mL cGMP Compliant Monolithic Column (C12 Linker) (2 µm channels)

CIMmultus® Columns for Multimodal Chromatography

Order Code	Description
311.5130-2	CIMmultus® H-Bond® ADC 1 mL Monolithic Column (2 µm channels)
311.5118-2	CIMmultus® PrimaS® 1 mL Monolithic Column (2 µm channels)

Other column sizes and channel diameters available on request.

CIMmultus® Process Packs

Order Code	Description
100.0011-2	CIMmultus® HiP2 Plasmid Process Pack® 1–1 mL (1× DEAE 311.5114-2, 1× C4 HLD 311.8136-2)
100.0016-2	CIMmultus® HiP2 Plasmid Process Pack® 4–4 mL (1× DEAE 414.5114-2, 1× C4 HLD 414.8136-2)
100.0012-2	CIMmultus® HiP2 Plasmid Process Pack® 8–8 mL (1× DEAE 411.5114-2, 1× C4 HLD 411.8136-2)
100.0017-2	CIMmultus® HiP2 Plasmid Process Pack® 40–40 mL (1× DEAE 614.5114-2, 1× C4 HLD 614.8136-2)
100.0013-2	CIMmultus® HiP2 Plasmid Process Pack® 80–80 mL (1× DEAE 611.5114-2, 1× C4 HLD 611.8136-2)
100.0018-2	CIMmultus® HiP2 Plasmid Process Pack® 400–400 mL (1× DEAE 814.5114-2, 1× C4 HLD 814.8136-2)
100.0014-2	CIMmultus® HiP2 Plasmid Process Pack® 800–800 mL (1× DEAE 811.5114-2, 1× C4 HLD 811.8136-2)
100.0019-2	CIMmultus® HiP2 Plasmid Process Pack® 4,000–4,000 mL (1× DEAE 1014.5114-2, 1× C4 HLD 1014.8136-2)
100.0015-2	CIMmultus® HiP2 Plasmid Process Pack® 8,000–8,000 mL (1× DEAE 1011.5114-2, 1× C4 HLD 1011.8136-2)
101.0012-2	CIMmultus® HiP2 Plasmid Process Pack® 8–8 mL cGMP Compliant (1× DEAE 901.5114-2, 1× C4 HLD 901.8136-2)
101.0017-2	CIMmultus® HiP2 Plasmid Process Pack® 40–40 mL cGMP Compliant (1× DEAE 914.5114-2, 1× C4 HLD 914.8136-2)
101.0013-2	CIMmultus® HiP2 Plasmid Process Pack® 80–80 mL cGMP Compliant (1× DEAE 911.5114-2, 1× C4 HLD 911.8136-2)
101.0018-2	CIMmultus® HiP2 Plasmid Process Pack® 400–400 mL cGMP Compliant (1× DEAE 924.5114-2, 1× C4 HLD 924.8136-2)
101.0014-2	CIMmultus® HiP2 Plasmid Process Pack® 800–800 mL cGMP Compliant (1× DEAE 921.5114-2, 1× C4 HLD 921.8136-2)
101.0014-6-2	CIMmultus® HiP2 Plasmid Process Pack® 800–800 mL cGMP Compliant (1× DEAE 921.5114-6, 1× C4 HLD 921.8136-2)
101.0019-2	CIMmultus® HiP2 Plasmid Process Pack® 4,000–4,000 mL cGMP Compliant (1× DEAE 934.5114-2, 1× C4 HLD 934.8136-2)
101.0015-2	CIMmultus® HiP2 Plasmid Process Pack® 8,000–8,000 mL cGMP Compliant (1× DEAE 931.5114-2, 1× C4 HLD 931.8136-2)
100.0200-2	CORNERSTONE Exosome Process Development Pack, HS code: 9027.90.00 (HTS: 8421.99.0080) includes: 1× 311.5120-2 CIMmultus® EV-1 Advanced Composite Column (Pores 2 µm) 5× 100.0100 Kryptonase® 5× 100.0101 Activator



Peripherals & Accessories

Connectors and adapters for CIMmultus® Columns

CIMmultus® 1, 4, 8 mL (non-GMP)



10-32 coned



10-32 coned male to
 ■ 5/16-24 coned female,
 Material: PEEK

CIMmultus® 4 and 8 mL cGMP compliant and all CIMmultus® 40 mL and larger



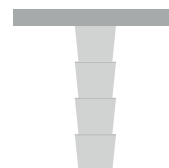
25 mm TC



25 mm TC to
 ■ 10-32 coned, Material: SS or PEEK
 ■ 5/16-24 coned, Material: SS or PEEK
 ■ 5/16-24 flat, Material: PEEK



25 mm TC



25 mm TC to
 ■ HOSE-TAIL 1/2" - 3/8",
 Hose OD | ID = 9.5 | 6.5 mm,
 Material: SS
 ■ HOSE-TAIL 1/2" - 1/4",
 Hose OD | ID = 6.5 | 3.4 mm,
 Material: SS

Order Code	Description
422.0913	Adapter 10-32 coned male to 5/16-24, coned female, (pack of 2)
422.0901	Adapter PP, 5/16-24 flat female to 5/16-24 cone male (pack of 2)
422.0908	Adapters PEEK, TC 25 mm to 10-32 UNF cone female (pack of 2)
422.0911	Adapters PEEK, TC 25 mm to 5/16-24 flat female (pack of 2)
422.0907	Adapters PEEK, TC 25 mm to 5/16-24 UNF cone female (pack of 2)
422.0900	Adapters PP, 10-32 female to 5/16-24 cone male (pack of 2)
422.0912	Adapters PP, 5/16-24 cone female to 5/16-24 cone male (pack of 2)
422.0904	Adapters SS, TC 25 mm to 10-32 cone female (pack of 2)
422.0905	Adapters SS, TC 25 mm to 5/16-24 cone female (pack of 2)
422.0910	Adapters TC 25 mm HOSE-TAIL 1/2" - 1/4", Hose OD/ID=6.5/3.4 mm, Material 316 L (pack of 2)
422.0909	Adapters TC 25 mm HOSE-TAIL 1/2" - 3/8", Hose OD/ID=9.5/6.5 mm, Material 316 L (pack of 2)
422.0903	Blind fitting for autoclaving 80 mL cGMP compliant SS
422.0902	Blind fitting for autoclaving 8 mL cGMP compliant SS

Autoclaving adaptors for stainless steel CIM columns with 25 mm TC (SS: 8, 80 mL) available on request.

Germany

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 **For more information about Monolithic Chromatography Columns, visit**

www.sartorius.com/en/products/process-chromatography/chromatography-consumables/monolithic-chromatography

 **For more information about Vaccine Development, visit**

www.sartorius.com/en/applications/biopharmaceutical-manufacturing/vaccines/vaccine-development