



Mixed-Mode Resins/Media Selection Card

Bio-Rad offers a wide range of mixed-mode resins/media, which can be used for purification of antibodies, proteins, and viruses as well as removal of aggregates, endotoxins, host cell proteins, and DNA.

Use this card to select the optimal resin/media for your purification project.



Visit bio-rad.com/MMResins for more information.

Optimal Mixed-Mode Resins/Media for Multiple Purification Applications

Property	Process Purification Resin Type			
	CHT™ Ceramic Hydroxyapatite	CFT™ Ceramic Fluoroapatite	MPC™ Ceramic Hydroxyfluoroapatite	Nuvia™ cPrime™
Resin/media type	Mixed-mode (cation exchange and metal affinity)	Mixed-mode (cation exchange and metal affinity)	Mixed-mode (cation exchange and metal affinity)	Mixed-mode (HIC and cation exchange)
Particle size	20 ± 2, 40 ± 4, 80 ± 8 µm	40 ± 4 µm	40 ± 4 µm	70 ± 10 µm
Ionic capacity	—	—	—	110–150 µeq/ml
Dynamic binding capacity (DBC)	≥25 mg lysozyme/g* 25–60 mg IgG/ml at 300 cm/hr*	14–21 mg lysozyme/g* 33 mg IgG/ml*	≥25 mg lysozyme/g* 25–50 mg IgG/ml*	>40 mg hlgG/ml (at 10% breakthrough) at 300 cm/hr* >60 mg lactoferrin/ml*
Recommended linear flow rate	50–300 cm/hr	50–300 cm/hr	50–300 cm/hr	50–600 cm/hr
pH stability	6.5–14	Operating pH: 5–14 Storage pH: 11–14	6.5–14	Short-term: 3–14 Long-term: 4–13

HIC, hydrophobic interaction chromatography; hlgG, human IgG.

* Go to the product detail page or [bulletin 6713](#) on bio-rad.com to see how the DBC was determined and for other technical details.

To see how these mixed-mode resins/media have been used in various purification applications, refer to the following bulletins:

- mAb purification: [6875](#)
- IgG purification: [6793](#)
- Adenovirus purification: [6807](#)
- Mammalian virus purification: [6790](#)
- Protein purification: [6810](#)
- Aggregate removal: [6808](#)
- Endotoxin removal: [6813](#)
- Host DNA removal: [6881](#)

Ordering Information

CFT Ceramic Fluoroapatite			MPC Ceramic Hydroxyfluoroapatite			Nuvia cPrime		
Catalog #	Size		Catalog #	Size		Catalog #	Size	
Bio-Scale™ Mini CFT Type II Cartridges	7324405 7324406	1 x 5 ml 5 x 5 ml	Foresight™ MPC Type I Plates	732-4785	40 µm, 2 x 96-well, 20 µl	Foresight Nuvia cPrime Plates	732-4705	2 x 96-well, 20 µl
CFT Ceramic Fluoroapatite Type II Media, 40 µm	1585200 1575000 157-5100 157-5500	10 g 100 g 1 kg 5 kg	Foresight MPC Type I RoboColumn Unit	732-4828 732-4829	40 µm, 200 µl 40 µm, 600 µl	Foresight Nuvia cPrime RoboColumn Unit	732-4807 732-4808	200 µl 600 µl
			Foresight MPC Type I Column	732-4737 732-4757	40 µm, 1 ml 40 µm, 5 ml	Foresight Nuvia cPrime Column	732-4722 732-4742	1 ml 5 ml
			MPC Ceramic Hydroxyfluoroapatite Type I Media, 40 µm	1580200 1570200 157-0201 157-0205	10 g 100 g 1 kg 5 kg	Nuvia cPrime Resin	1563401 1563402 156-3403 156-3404 156-3405 156-3406	25 ml 100 ml 500 ml 1 L 5 L 10 L

CHT Ceramic Hydroxyapatite		
Catalog #	Size	
Foresight CHT Type I Plates	732-4716	40 µm, 2 x 96-well, 20 µl
Foresight CHT Type II Plates	732-4718	40 µm, 2 x 96-well, 20 µl
Foresight CHT Type I RoboColumn Unit	732-4822	40 µm, 200 µl
Foresight CHT Type II RoboColumn Unit	732-4823 732-4825 732-4826	40 µm, 600 µl 40 µm, 200 µl 40 µm, 600 µl
Foresight CHT Type I Column	732-4735 732-4755	40 µm, 1 ml 40 µm, 5 ml
Foresight CHT Type II Column	732-4736 732-4756	40 µm, 1 ml 40 µm, 5 ml
CHT Type I Media, 40 µm	1584000 1570040 157-0041 157-0045	10 g 100 g 1 kg 5 kg
CHT Type I Media, 80 µm	1588000 1570080 157-0081 157-0085	10 g 100 g 1 kg 5 kg
CHT Type II Media, 40 µm	1584200 1574000 157-4100 157-4500	10 g 100 g 1 kg 5 kg
CHT Type II Media, 80 µm	1588200 1578000 157-8100 157-8500	10 g 100 g 1 kg 5 kg

RoboColumn is a trademark of Atoll GmbH.

