

Monoclonal Antibody Purification Resin Selection Card

Bio-Rad offers a wide range of resins for each phase of monoclonal antibody process purification, at scales ranging from nanograms to kilograms.

Use this card to select the optimal resin for your monoclonal antibody process purification.

Visit bio-rad.com/web/mAbChromResins for more information.

Optimal Resin for Monoclonal Antibody Purification

Property	Purification Step						
	Capture	Capture and Intermediate	Intermediate	Intermediate and Polish			
Resin type	UNOsphere SUPrA™	Nuvia™ S	UNOsphere™ Q	Nuvia Q	Nuvia HR-S	CHT™ Ceramic Hydroxyapatite	Nuvia™ cPrime™
Chromatography type	Affinity	Cation exchange	Anion exchange	Anion exchange	Cation exchange	Mixed-mode (cation exchange and metal affinity)	Mixed-mode (HIC and cation exchange)
Particle size	53–61 µm	85 ± 15 µm	120 µm	85 ± 15 µm	50 ± 10 µm	20 ± 2, 40 ± 4, 80 ± 8 µm	70 ± 10 µm
Ionic capacity	N/A	90–150 µeq/ml	120 µeq/ml	100–170 µeq/ml	100–180 µeq/ml	—	110–150 µeq/ml
Dynamic binding capacity (DBC)	30 ± 3 mg/ml*	≥110 mg/ml at 300 cm/hr*	≥180 mg BSA/ml at 150 cm/hr* ≥125 mg BSA/ml at 600 cm/hr*	≥170 mg/ml at 300 cm/hr*	≥70 mg/ml at 300 cm/hr*	≥25 mg lysozyme/g* 25–60 mg IgG/ml at 300 cm/hr*	>40 mg hlgG/ml (at 10% breakthrough) at 300 cm/hr* >60 mg lactoferrin/ml*
Recommended linear flow rate	100–600 cm/hr	50–300 cm/hr	50–300 cm/hr	50–600 cm/hr	50–200 cm/hr	50–300 cm/hr	50–600 cm/hr
pH stability	3–11	Short-term: 2–14 Long-term: 4–13	1–14	Short-term: 2–14 Long-term: 4–12	Short-term: 2–14 Long-term: 4–13	6.5–14	Short-term: 3–14 Long-term: 4–13

BSA, bovine serum albumin; HIC, hydrophobic interaction chromatography.

Refer to [bulletin 6875](#) to see how these resins help in monoclonal antibody process purification.

* 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.

Ordering Information

Capture			Capture and Intermediate			Intermediate		
UNOsphere SUPrA	Catalog #	Size	Nuvia S	Catalog #	Size	UNOsphere Q	Catalog #	Size
Foresight™ UNOsphere SUPrA RoboColumn Unit	732-4834	200 µl	Foresight Nuvia S Plates	732-4701	2 x 96-well, 20 µl	Foresight UNOsphere Q Plates	732-4714	2 x 96-well, 20 µl
Foresight UNOsphere SUPrA Column	732-4729	1 ml	Foresight Nuvia S RoboColumn Unit	732-4801	200 µl	Foresight UNOsphere Q RoboColumn Unit	732-4819	200 µl
	732-4749	5 ml		732-4802	600 µl		732-4820	600 µl
UNOsphere SUPrA Affinity Chromatography Resin	1560218	25 ml	Foresight Nuvia S Column	732-4720	1 x 1 ml	Foresight UNOsphere Q Column	732-4732	1 ml
	1560219	100 ml		732-4740	1 x 5 ml		732-4752	5 ml
	156-0220	500 ml	Nuvia S Resin	1560311	25 ml	UNOsphere Q Resin	1560101	25 ml
	156-0221	5 L		1560313	100 ml		1560103	100 ml
	156-0222	10 L		156-0315	500 ml		156-0105	500 ml
				156-0317	10 L		156-0107	10 L

Intermediate and Polish

Nuvia Q	Catalog #	Size
Foresight Nuvia Q Plates	732-4703	2 x 96-well, 20 µl
Foresight Nuvia Q RoboColumn Unit	732-4804	200 µl
	732-4805	600 µl
Foresight Nuvia Q Column	732-4721	1 x 1 ml
	732-4741	1 x 5 ml
Nuvia Q Resin	1560411	25 ml
	1560413	100 ml
	156-0415	500 ml
	156-0417	10 L

Intermediate and Polish

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
	732-4823	40 µm, 600 µl
Foresight CHT Type II RoboColumn Unit	732-4825	40 µm, 200 µl
	732-4826	40 µm, 600 µl
Foresight CHT Type I Column	732-4735	40 µm, 1 ml
	732-4755	40 µm, 5 ml
Foresight CHT Type II Column	732-4736	40 µm, 1 ml
	732-4756	40 µm, 5 ml
CHT Type I Media, 40 µm	1584000	10 g
	1570040	100 g
	157-0041	1 kg
	157-0045	5 kg
CHT Type I Media, 80 µm	1588000	10 g
	1570080	100 g
	157-0081	1 kg
	157-0085	5 kg
CHT Type II Media, 40 µm	1584200	10 g
	1574000	100 g
	157-4100	1 kg
	157-4500	5 kg
CHT Type II Media, 80 µm	1588200	10 g
	1578000	100 g
	157-8100	1 kg
	157-8500	5 kg

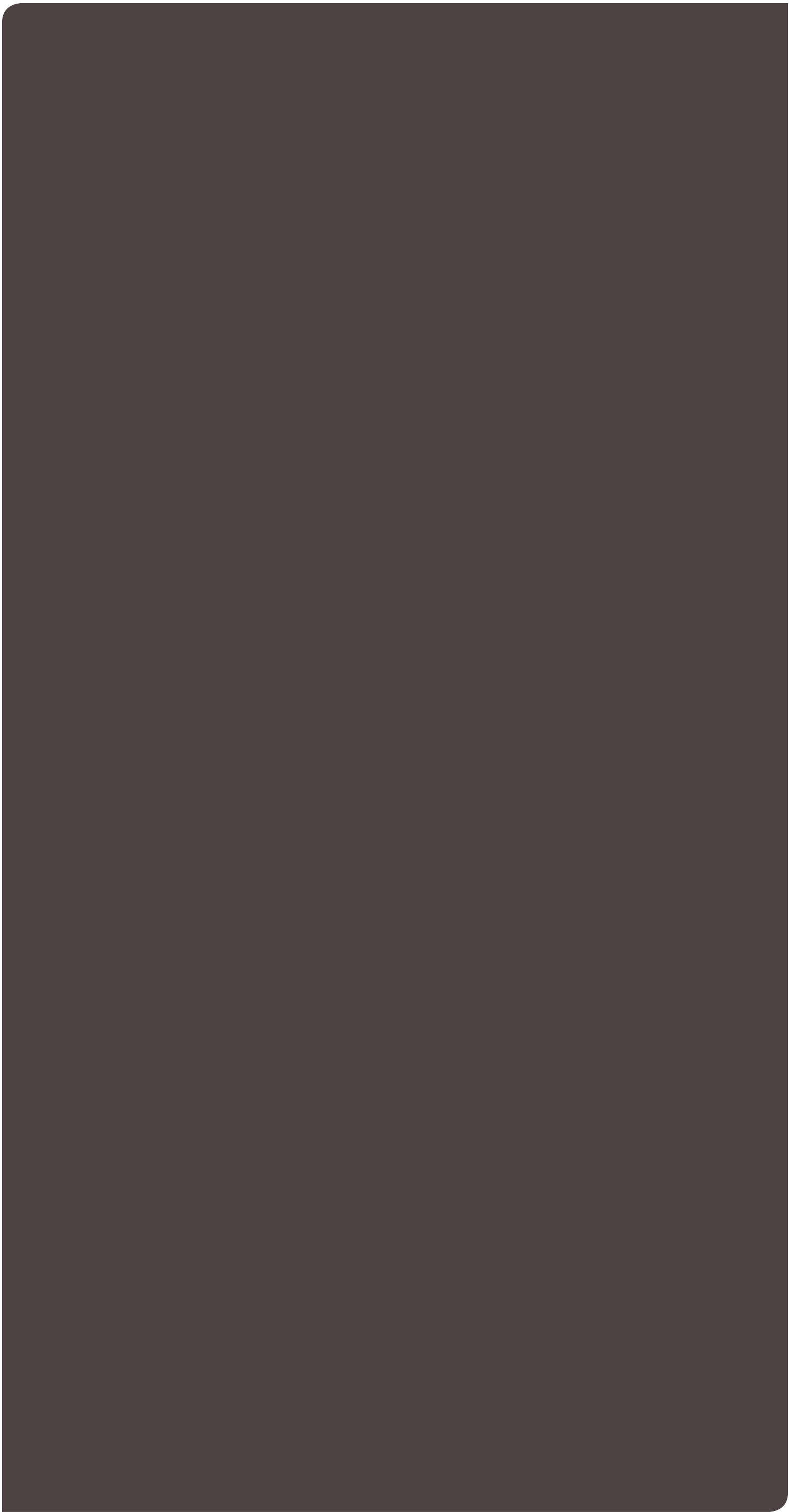
Intermediate and Polish

Nuvia HR-S	Catalog #	Size
Foresight Nuvia HR-S Plates	732-4707	2 x 96-well, 20 µl
Foresight Nuvia HR-S RoboColumn Unit	732-4831	200 µl
	732-4832	600 µl
Foresight Nuvia HR-S Column	732-4723	1 x 1 ml
	732-4743	1 x 5 ml
Nuvia HR-S Resin	1560511	25 ml
	1560513	100 ml
	156-0515	500 ml
	156-0517	10 L

Intermediate and Polish

Nuvia cPrime	Catalog #	Size
Foresight Nuvia cPrime Plates	732-4705	2 x 96-well, 20 µl
Foresight Nuvia cPrime RoboColumn Unit	732-4807	200 µl
	732-4808	600 µl
Foresight Nuvia cPrime Column	732-4722	1 ml
	732-4742	5 ml
Nuvia cPrime Resin	1563401	25 ml
	1563402	100 ml
	156-3403	500 ml
	156-3404	1 L
	156-3405	5 L
	156-3406	10 L

RoboColumn is a trademark of Atoll GmbH.



Visit [bio-rad.com/web/mAbChromResins](https://www.bio-rad.com/web/mAbChromResins) for more information.