

Got Purification Troubles? Achieve High-Level Impurity Clearance during mAb Purification with a Single Media



The Challenge

Is your current process limiting your productivity during monoclonal antibody (mAb) purification? Are you unable to achieve proper clearance of your impurities?



Purification Tip

Using ceramic hydroxyapatite could be the answer. Our 40 μm ceramic hydroxyapatite media, CHT Type I (bio-rad.com/CHTTypeI) and CHT XT (bio-rad.com/CHTXT), our newest CHT, can be used to effectively and efficiently remove impurities during mAb purifications.



Our Approach

CHT Type I, 40 μm and CHT XT, 40 μm Media provide high-performance removal of impurities, including aggregates (Figures 1 and 2), leached Protein A, host cell protein, DNA, and endotoxins, during mAb purifications. The dynamic binding capacity, using mAb G (pI 9.2–9.5), is ≥ 70 mg/ml for CHT Type I, 40 μm and ≥ 60 mg/ml for CHT XT, 40 μm . Contact your Bio-Rad process chromatography specialist to discuss method development for your application (bio-rad.com/purificationexperts).



CHT Type I Media, 40 μm

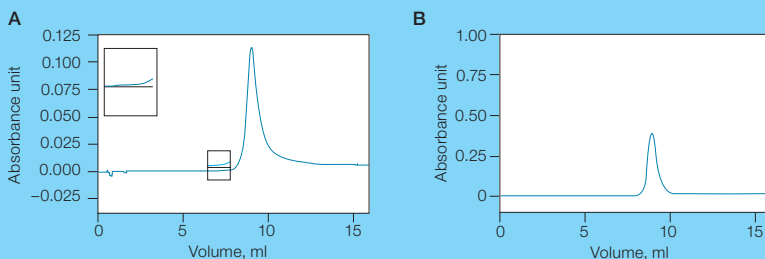


Fig. 1. Aggregate clearance using CHT Type I, 40 μm . A, Size exclusion chromatography (SEC) profile of mAb G starting material; B, SEC profile of pooled monomer fractions. Starting aggregate content: 4.4%; ending aggregate content: 0.03%.

CHT XT Media, 40 μm

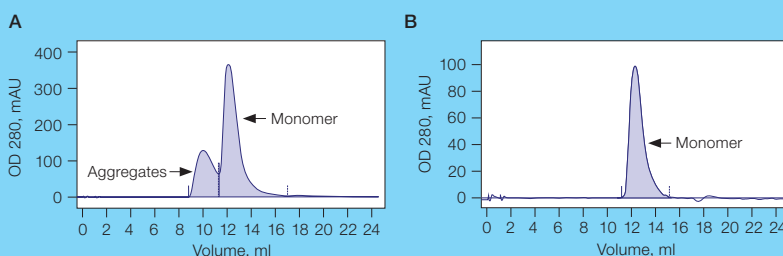


Fig 2. Aggregate clearance using CHT XT, 40 μm . A, SEC profile of mAb G load; B, final SEC profile of mAb G monomer pool. Starting aggregate content: 28%; ending aggregate content: <0.1%.

For examples of purifications achieved with these products, see Application Notes 6749 and 7109 (acidic mAb), 6964 (recombinant protein), and 5853 (chimeric IgG).

Ordering Information

CHT Ceramic Hydroxyapatite, Type I	Catalog #	Size
Foresight CHT Type I Plates	732-4716	40 µm, 2 x 96-well, 20 µl
Foresight CHT Type I RoboColumn Unit	732-4822	40 µm, 200 µl
Foresight CHT Type I Column	732-4735	40 µm, 600 µl
Foresight CHT Type I Column	732-4755	40 µm, 1 ml
CHT Type I Media, 20 µm	1582000	40 µm, 5 ml
	1570020	10 g
	157-0021	100 g
		1 kg
CHT Type I Media, 40 µm	1584000	10 g
	1570040	100 g
	157-0041	100 g
	157-0045	1 kg
		5 kg
CHT Type I Media, 80 µm	1588000	10 g
	1570080	100 g
	157-0081	1 kg
	157-0085	5 kg

CHT Ceramic Hydroxyapatite XT	Catalog #	Size
Foresight CHT XT Plates	12003151	40 µm, 2 x 96-well, 20 µl
Foresight CHT XT RoboColumn Unit	12003152	40 µm, 200 µl
	12003148	40 µm, 600 µl
Foresight CHT XT Column	12003150	40 µm, 1 ml
	12003149	40 µm, 5 ml
CHT XT Media, 40 µm	12002457	10 g
	12002454	100 g
	12002456	1 kg
	12002455	5 kg

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