

LOABeads™ MabBind A

For cell culture harvests

Purify

IgG

from

Cell
culture

- **High Purity IgG**
From cell cultures –
hybridoma and CHO
- **Unmatched Simplicity**
Easy to use platform that needs no
instruments
- **Highly Scalable**
From microscale to 900 mg IgG in 500 ml
sample, in combination with LOABeads
MagSep 500 magnetic separator



LOABeads™ MabBind A

Protein A coupled magnetic agarose beads specifically developed for the purification of monoclonal IgG antibodies from cell culture media, such as from hybridoma and CHO cell cultures (Fig 1). The black beads are clearly visible, strongly attracted to external magnets, and easily resuspended. A high specificity and high capacity ensures that a very pure antibody is obtained with a high yield.

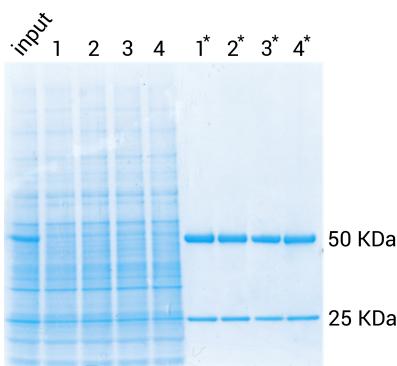


Fig 1. Parallel purification of a humanized monoclonal antibody from a CHO cell media. Four samples of 20 ml cell culture harvest, IgG titer 20–25 µg/ml, were incubated with 100 µl settled LOABeads MabBind A in each 50 ml tube for 2 hours at room temperature. The beads were separated using either the LOABeads MagSep 15/50 magnetic separator or a handheld cube magnet. Beads were washed in PBS and eluted with 60 mM citrate, pH 3.0. Purity of the four parallel purifications were visualized by SDS-PAGE under reducing conditions. Lane 1 harvest input, lanes 1–4 unbound material, lanes 1*–4* eluted material.

Usage

LOABeads MabBind A are ideal to use in magnetic bead affinity chromatography (MBAC), which can be a substitute for downstream column chromatography in lab-scale purification of antibodies, for use in, e.g., R&D, diagnostics, and characterizations of candidate biopharmaceutical IgG antibodies. The quantity of beads can be readily scaled up or down. Conditions from method scouting at small sample volumes, 1-10 ml, provide the same yield and purity when scaling up to 500 ml sample volumes. Parallel purification is possible from smaller sample volumes (Fig 1), as well as from the larger samples volumes.

With the LOABeads MagSep 15/50 magnetic separator, samples can be handled in standard 15 and 50 ml centrifuge tubes, for analytical and small-scale preparative work. The LOABeads MagSep 500 unit can handle at least 30 ml of settled beads in a 500 ml sample, giving a maximum adsorbent capacity of approximately 1 g IgG.

Product data

Ligand	Recombinant protein A
Matrix	4% agarose
Particle size	45–165 µm
Type magnetization	Super-paramagnetic
Product form	10% bead suspension in PBS with 20% ethanol
Binding capacity ¹	3 mg rabbit IgG/ml 10% bead suspension (30 mg/ml settled beads)
Binding conditions	Directly in cell culture media, pH 6–8
Elution conditions	60 mM citrate pH 3.0
Storage	+2 to +8°C in PBS with 20% ethanol
Stability	12 months
Regeneration	Reusable >20 times

¹ Binding capacity was determined by incubating 500 µl 10% LOABeads MabBind A (50 µl beads) with rabbit IgG (~2 mg/ml in 1 ml PBS) for 60 minutes at room temperature. Binding capacity is obtained with a yield of 90% or more under the conditions specified above.



Ordering information

Products	Quantity	Product No.
LOABeads MabBind A	1 ml beads	1004-1ml
LOABeads MabBind A	5 ml beads	1004-5ml
Related products	Quantity	Product No.
NdFeB cube magnet	1	2001
LOABeads MagSep 15/50	1	3001
LOABeads MagSep 500	1	4001