

# LOABeads™ Protein A

Magnetized bioseparation

**Purify**

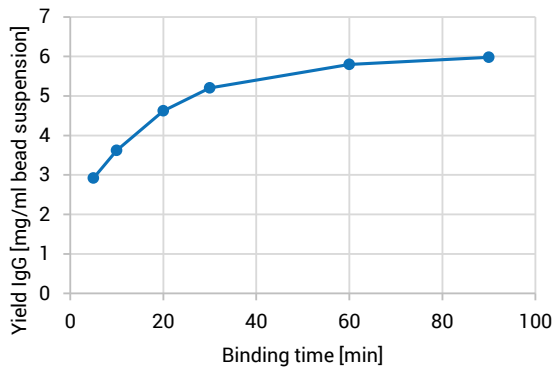
**Deplete**

**Immuno-  
precipitate**

- **Superior Capacity**  
@ 60 mg IgG/ml
- **Unmatched Simplicity**  
Easy to use platform that needs no instruments
- **Highly Scalable**  
From 0.5 to 500 ml using our magnetic separators
- **Quick & Visible**  
Clearly visible beads that separate and resuspend within seconds

# LOABeads™ Protein A

Super-paramagnetic agarose beads covalently coupled with recombinant protein A. The black beads are clearly visible, strongly attracted to external magnets and easily resuspended.



**Fig 1.** Relation of antibody adsorption capacity and contact time for LOABeads Protein A. 500 µl pre-washed bead suspension (50 µl beads) were mixed with 500 µl human serum. Beads were allowed to bind IgG for 5, 10, 20, 30, 60, and 90 min, before washing and elution. The graph shows yield of purified IgG obtained per ml of 10% bead suspension at different time points. Over 95% of the beads maximum binding capacity is reached within 1 hour, giving a yield close to 6 mg IgG/ml bead suspension.

## Usage

LOABeads Protein A are intended for purification of antibodies from serum and ascites fluid samples, IgG serum depletion and immunoprecipitation. The quantity of beads can readily be scaled up or down to match application. Combined with LOABeads MagSep separators, purification can be performed in standard 15 and 50 ml centrifuge tubes, as well as 500 ml bottles.

"I would definitely recommend LOABeads Protein A to others – You can obtain your antibody with satisfactory yield and purity within a very short time."

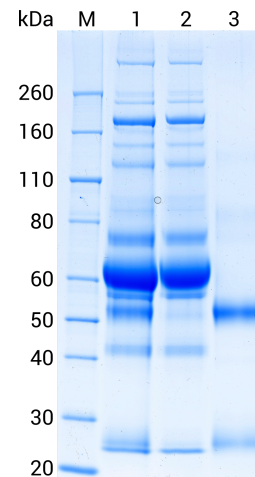
BARBORA JANKOVIČOVÁ,  
UNIVERSITY OF PARDUBICE,  
CZECH REPUBLIC

## 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 <sup>1</sup>	4 mg rabbit IgG/ml bead suspension
Max. binding capacity <sup>2</sup>	6 mg human IgG/ml bead suspension
Storage conditions	+2 to +8°C in PBS with 20% ethanol
Stability	24 months
Regeneration	Can be reused multiple times

<sup>1</sup> 90% binding of rabbit IgG (2 mg/ml) after 60 min reaction.

<sup>2</sup> Determined in an overloading test at 5 mg IgG/ml after 60 min reaction.



**Fig 2.** Human serum IgG depletion using LOABeads Protein A. Particles from 200 µl 10% bead suspension (20 µl beads) were mixed with 50 µl human serum and 700 µl PBS for 60 min. Beads were collected, washed, and eluted using a handheld neodymium cube magnet. Two elution fractions of 200 µl each, gave 352 µg IgG. Samples were separated on SDS-PAGE under reducing conditions and visualized using colloidal Coomassie. Lane M: size marker, lane 1: input serum, lane 2: depleted serum, lane 3: eluted IgG antibody (2 µg).

## Ordering information

Products	Quantity	Product No.
LOABeads Protein A	2x1 ml 10% beads	1001-2ml
LOABeads Protein A	5x1 ml 10% beads	1001-5ml
LOABeads Protein A	10 ml 10% beads	1001-10ml

Related Products	Quantity	Product No.
NdFeB cube magnet	1	2001
LOABeads MagSep 15/50	1	3001
LOABeads MagSep 500	1	4001