

# Antibody & Protein Purification Resins/Beads

Purification of antibodies/proteins is a demanding task. Purification techniques have to be chosen such that maximal yield, specificity and purity of the product is conserved in a time efficient manner. Purification adsorbents are widely used as a choice purification approach since they offer high reproducibility, capacity, specificity and flow rates. BioVision proudly offers a wide array of such adsorbents - resins/beads for purification of antibodies and recombinant fusion proteins.

## Antibody Purification Resins/Beads: Protein A/G/L – Agarose/Sepharose/Magnetic beads

BioVision has used a very stable conjugation chemistry to pair specific domains of Protein A/G/L with Agarose/Sepharose/Magnetic beads to offer you the most time and cost efficient resins for monoclonal and polyclonal antibody purification from many sources and to isolate antibody/antigen complexes in immunoprecipitation experiments.

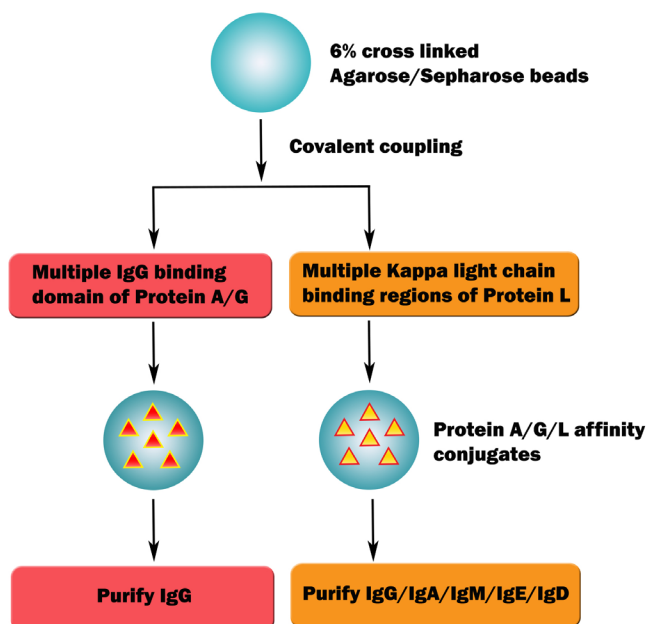
### Advantages of BioVision's Protein A/G/L Affinity Conjugates

<b>Enhanced Specificity</b>	Protein A & G contain only the IgG binding domains. Protein L contains only the Kappa light chain binding region.	No non-specific binding from the albumin/cell wall binding proteins.
<b>High Binding capacity</b>	Low MW of proteins ensures higher density of immobilization	≥ 36 mg/ml of IgG binding
<b>Higher Flow rate</b>	Due to low MW & high density of affinity proteins	2.89 ml/min or 4 cms/min
<b>Minimal ligand leaching</b>	Stable immobilization of the proteins to the beads	CNBr conjugation chemistry used
<b>Versatility</b>	Binds specifically to IgG, IgM, IgA, IgE and IgD	Protein A/G binds to IgG. Protein L binds to all classes.
<b>Durability</b>	Easy regeneration/reuse	Validated reuse for up to 10 times w/o significant loss of binding capacity.

### Advantages of Protein A/G/L

Purified from E.Coli by multiple chromatographic steps
≥ 98% pure (SDS-PAGE & HPLC)
His-tagged for easy purification/detection

## Protein A/G/L – Agarose/Sepharose resins/beads



## Protein A, Resins/Beads/Columns

Product	Cat. #	Size
Protein A (liquid), Recombinant	6500-10	10 mg
	6500-25	25 mg
	6500-100	100 mg
	6500-1000	1 g
Protein A (lyophilized), Recombinant	6500B-10	10 mg
	6500B-25	25 mg
	6500B-100	100 mg
	6500B-1000	1 g
Protein A-Agarose	6526-1	1 ml
	6526-5	5 ml
	6526-25	25 ml
	6526-100	100 ml
Hi-Bind™ Protein A-Agarose	6520-1	1 ml
	6520-5	5 ml
	6520-25	25 ml
	6520-100	100 ml
	6520-500	500 ml
Protein A Antibody	5500-100	100 µg
Protein A IgG Binding Buffer	6524-1000	1000 ml
	6524-3750	3750 ml
Protein A IgG Purification Buffer Kit	K6529-3	3 buffers
Protein A Magnetic Beads	6507-1	1 ml
Protein A Sepharose	6501-1	1 ml
	6501-5	5 ml
	6501-25	25 ml
	6501-100	100 ml
Protein A Sepharose Column	6508-1	1 ml
	6508-5	5 ml

## Protein G, Resins/Beads/Columns

Product	Cat. #	Size
Protein G, Recombinant	6510-1	1 mg
	6510-5	5 mg
	6510-10	10 mg
	6510-100	100 mg
	6510-1000	1 g
Hi-Bind™ Protein G-Agarose	6513-1	1 mg
	6513-5	5 mg
	6513-25	25 mg
	6513-100	100 mg
Protein G - Biotinylated	6512-100	100 µg
	6512-1000	1 mg
Protein G Antibody	5510-100	100 µg
Protein G Coated 96-well Plates	6522-5	5 x 96-well plates
Protein G Sepharose	6511-1	1 ml
	6511-5	5 ml
	6511-25	25 ml
	6511-100	100 ml
Protein G Sepharose Column	6518-1	1 ml
	6518-5	5 ml
Protein G Magnetic Beads	6517-1	1 ml

## Protein L & Resins

Product	Cat. #	Size
Protein L, Recombinant	6530-1	1 mg
	6530-5	5 mg
	6530-10	25 mg
	6530-100	100 mg
Protein L Antibody	5530-100	100 µg
Protein L Sepharose	6531-1	1 ml
	6531-5	5 ml
	6531-10	25 ml
	6531-100	100 ml
Protein L Sepharose Column	6538-1	1 ml
	6538-5	5 ml
Protein L Magnetic Beads	6537-1	1 ml

## Protein A/G

Product	Cat. #	Size
Protein A/G, Recombinant	6502-1	1 mg
	6502-5	5 mg
	6502-25	25 mg
	6502-100	100 mg
	6502-1000	1 g
Protein A/G - Biotin	6506-01	100 µg
	6506-1	1 mg
Protein A/G - FITC	6504-01	100 µg
	6504-1	1 mg
Protein A/G Sepharose	6503-1	1 ml
	6503-5	5 ml
	6503-25	25 ml
	6503-100	100 ml
Protein A/G Sepharose Column	6528-1	1 ml
	6528-5	5 ml
Protein A/G Magnetic Beads	6527-1	1 ml

## Protein A/G/L & Resins

Product	Cat. #	Size
Protein A/G/L, Recombinant	6540-1	1 mg
	6540-5	5 mg
	6540-25	25 mg
	6540-100	100 mg
	6540-1000	1 g
Protein A/G/L Sepharose	6541-1	1 ml
	6541-5	5 ml
	6541-25	25 ml
	6541-100	100 ml
Protein A/G/L Sepharose Column	6548-1	1 ml
	6548-5	5 ml
Protein A/G/L Magnetic Beads	6547-1	1 ml

## Jacalin Sepharose

Product	Cat. #	Size
Jacalin Antibody	5005-100	100 µg
Jacalin Protein	6560-5 6560-25 6560-100	5 mg 25 mg 100 mg
Jacalin-Sepharose	6561-1 6561-5 6561-25	1 ml 5 ml 25 ml

**Note:** SEPHAROSE is a registered trademark of GE Healthcare companies.

**Table 1.** Properties of BioVision's Protein A, G and Jacalin resins

Product	Ligand	# of IgG binding sites	Source	MW	pI	Coupling method	Flow rate* (ml/min)	Binding Capacity (mg/ml)		
								Human IgG	Rabbit IgG	Human IgA1
Protein A-Agarose (6526)	Protein A	5	E. Coli	39.21 kDa	5.4	CNBr	2.89	≥ 20	≥ 20	-
Hi-Bind™ Protein A-Agarose (6520)								≥ 36	≥ 36	-
Protein A-Sepharose (6501)							2.07	≥ 16	≥ 16	-
Protein A-Magnetic Beads (6507)							-	≥ 20	≥ 20	-
Hi-Bind™ Protein G Agarose (6513)	Protein G	3	E. Coli	26.1 kDa	4.9	CNBr	2.89	≥ 20	≥ 20	-
Protein G-Sepharose (6511)								2.07	≥ 30	≥ 30
Protein G-Magnetic beads (6517)							-	≥ 20	≥ 20	-
Jacalin Sepharose (6561)	Jacalin	-	Jack fruit seed	23.4 kDa	6.6	CNBr	2.07	≥ 15	≥ 15	2-3

\*Linear flow rate determined in 2 ml column with internal diameter of 1.5 cm.

## Protein Purification Resins/Beads

Majority of the recombinant proteins are expressed as fusion proteins with specific affinity tags which help in their downstream purification. BioVision has made use of this fact in designing purification resins for proteins. You can use these Agarose/Sepharose resins for purification of proteins expressed with tags/ labels such as GST, His and Biotin. In addition, our resins can be used for purification / activation of proteins with plasmin/thrombin cleavage sites.

### Protein Purification Resins

Product	Cat. #	Size
Hi-Bind™ Albumin-IgG Depletion Beads	7933-1	1 ml
	7933-5	5 ml
	7933-25	25 ml
Calmodulin-Sepharose Beads	7934-1	1 ml
	7934-5	5 ml
	7934-10	10 ml
Hi-Bind™ Cibacron Blue-Agarose beads	7923-10	10 ml
	7923-50	50 ml
Glutathione Sepharose	6555-1	1 ml
	6555-10	10 ml
	6555-50	50 ml
Heparin Sepharose	6553-1	1 ml
	6553-10	10 ml
	6553-50	50 ml
Heparin Sepharose Column	6554-1	1 ml
	6554-5	5 ml
Immobilized Catalase Beads	7931-1	1 ml
	7931-10	10 ml
Ni-IDA Spin Columns	6567-25	25 columns
Ready-to-Use Ni-IDA Spin Purification Kit	K6567-25	25 purifications
Hi-Bind™ Ni QR Agarose Beads	6562-1	1 ml
	6562-10	10 ml
	6562-100	100 ml
	6562-500	500 ml
Ready-to-Use Ni QR Agarose Beads Buffer Kit	K6563-3	3 components
Plasmin Sepharose Beads	7926-1	1 ml
	7926-5	5 ml
	7926-25	25 ml
EZEnrich™ Polyubiquitin Beads	6568-300	300 µl
Streptavidin-Sepharose Beads	6565-2	2 ml
	6565-5	5 ml
	6565-10	10 ml
Thrombin Sepharose Beads	7925-1	1 ml
	7925-5	5 ml
	7925-25	25 ml
Urokinase Sepharose Beads	7927-1	1 ml
	7927-5	5 ml
	7927-25	25 ml