

Catalog Number: **MG-3232MA**

Basic Information

Catalog Number:

MG-3232MA

Type:

VHH

Applications:

Depletion (Removal of BSA from Antibody)

Class:

Recombinant - Animal free production

Description

ChromoTek BSA Depletion Magnetic Agarose consists of an anti-BSA VHH (Nanobody), which is coupled to magnetic agarose beads. It can be used for fast & efficient removal of BSA from antibodies that are supplied with BSA containing buffers.

Note: BSA Depletion Magnetic Agarose does not come with a magnet.

Affinity

3 nM

Storage

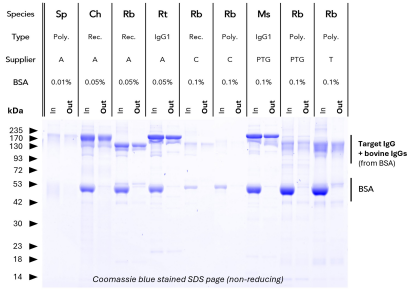
Storage:

Upon arrival store at +4°C / do not freeze!

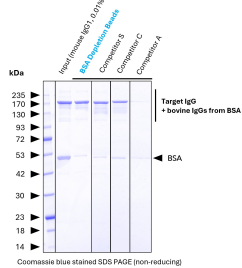
Storage Buffer:

20% Ethanol

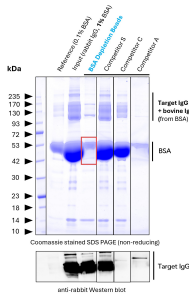
Selected Validation Data



BSA depletion from various antibodies. Proteintech BSA Depletion Magnetic Agarose was validated with antibodies from various suppliers and with varying BSA content (from 0 – 0.1%). IgGs run at ~150 kDa (non-reducing SDS PAGE), BSA runs at ~50 kDa. Comparing the Input (In) vs. output (Out) lanes consistently shows successful removal of BSA with minimal residual BSA in the output fraction. Poly = Polyclonal, Ms = Mouse, Rb = Rabbit, Ch, Sp = SI



BSA depletion benchmarking. Proteintech BSA Depletion Agarose (Lane 4) was evaluated for BSA depletion efficiency and compared with competitor products. The BSA reference (Lane 2) contains 0.1% BSA and is contaminated with bovine IgG (which is normal). The starting antibody contains 0.01% BSA. Proteintech BSA Depletion Beads remove approximately 95% of the BSA. In contrast, competitor products partly leave higher residual BSA levels. Other competitor products also exhibit reduced recovery of the target IgG (Lane 7).

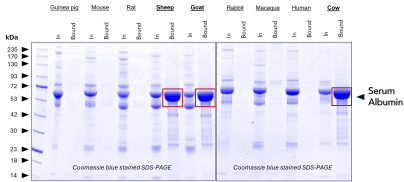


BSA depletion benchmarking. Proteintech BSA Depletion Agarose (Lane 4) was evaluated for BSA depletion efficiency and compared with competitor products. The BSA reference (Lane 2) contains 0.1% BSA and is contaminated with bovine IgG (which is normal). The starting antibody preparation contains 1% BSA. Proteintech BSA Depletion Agarose removes approximately 90% of the BSA. In contrast,

BSA content		c BSA [mg/ml]	recommended volume (Magnetic Agarose - slurry)		
			for 100 µl Ab solution	for 150 µl Ab solution	for 300 µl Ab solution
0.1 %	1	1	150 µl Beads	250 µl Beads	500 µl Beads
0.5 %	5	5	300 µl Beads	500 µl Beads	1000 µl Beads
1 %	10	10	500 µl Beads	1000 µl Beads	1500 µl Beads

BSA content		c BSA [mg/ml]	Number of BSA depletions per product size (1 ml, 2 ml, 5 ml) following the recommended bead volume (see table above)		
			for 100 µl Ab solution	for 150 µl Ab solution	for 300 µl Ab solution
1 ml size					
0.1 %	1	7 x	4 x	2 x	
0.5 %	5	3 x	2 x	1 x	
1 %	10	2 x	1 x		
2 ml size					
0.1 %	1	14 x	8 x	4 x	
0.5 %	5	6 x	4 x	2 x	
1 %	10	4 x	2 x	1 x	
5 ml size					
0.1 %	1	35 x	20 x	10 x	
0.5 %	5	15 x	10 x	5 x	
1 %	10	10 x	5 x	3 x	

Reference table for bead usage per depletion. Table 1 shows the recommended bead volume for each antibody solution volume (top row) and corresponding BSA concentration (%) (first column). Table 2 shows the expected number of depletions for each unit size (1 mL, 2 mL, and 5 mL), based on the antibody solution volume and BSA concentration, using the recommended bead volumes specified in Table 1.



Immunoprecipitation of serum albumin from different species using BSA Depletion Agarose. BSA Depletion beads were used to test for cross reactivity to albumin from other species. As expected, strong cross-reactivity to albumin from closely related species (bovid family: sheep, goat) can be observed. Other serum albumin species do not bind to the beads (e.g., HSA from humans).