

## 101Bio Albumin Depletion Reagent for Plasma and Serum

**Cat. #:** P5W13 (10 ml)

**Shipping and Storage:** Ambient temperature

**Shelf Life:** 12 months

### Product Description:

Human/animal serum and plasma are the best source of samples for biomarker identification. However, the presence of large amount of albumin interferes with many assays and functional proteomic analysis. Serum albumin accounts for 50-70% of the total serum protein that causes loss of resolution for 1D and 2D electrophoresis. Effective removal of albumin using our reagent can increase sensitivity of the assay for many folds. Unlike resin-based depletion kit (that only deals with microliter amount of sample), Minute albumin depletion reagent can handle a few microliters to several ml of samples. Over 90% of albumin can be removed in less than 5 min. This product is for research use only.

**Equipment and reagent required:** Table top microcentrifuge, deionized water and phosphate buffered saline (PBS).

**Product Contents:** 101Bio Albumin Depletion Reagent for Plasma and Serum: 1 of 10 ml / bottle








### Protocol:

1. Add serum or plasma sample to a test tube. For easy handling We recommend adding 100  $\mu$ l undiluted or diluted serum or plasma to a 1.5 ml Eppendorf tube.
2. Add equal amount albumin depletion reagent and mix by pipetting up and down for 10-20 times.
3. Centrifuge at 14,000 to 16,000 X g at ambient temperature for 2-3 min. Remove and discard supernatant (albumin fraction). Slowly add 100 to 200  $\mu$ l deionized water to the tube and remove immediately. This step is to wash residual albumin on the wall of the tube. Resuspend the pellet in 100-200  $\mu$ l buffer of your choice for downstream experiments.

### Protocol optimization:

1. Following above protocol once can remove about 70% albumin from animal serum or plasma. To remove higher percentage of albumin, it is recommended to precipitate the sample twice. For example: resuspend the pellet in step 3 in 100  $\mu$ l PBS and repeat step 2-3.
2. If small amount of sample is available, it is recommended to dilute it in PBS. For example: dilute the serum/plasma sample with PBS 1: 2-1:10 and perform above protocol.
3. Resuspended pellet contains serum proteins and higher concentration of sodium salt and other salt. It can be used directly for SDS-PAGE but it is necessary to remove the salts by a desalting column for 2D gel and some other analysis.

### Related products:

Cat.#	Kit Name	Application	Protein Status	Minute
P501	Total protein kit	cells  total protein	denatured / native	1 ~ 8
P502	Total protein kit	tissues  total protein	denatured / native	1 ~ 8
P503	Membrane protein kit	cells / tissues  membrane protein	native , detergent-free	20 ~ 45
P504	Nuclear protein kit	cells / tissues  nuclear & cytosol protein	native	6 ~ 8
P505	Detergent-free kit	cells  total protein	denatured / native	5 ~ 8
P506	Detergent-free kit	Tissues  total protein	denatured / native	5 ~ 8
P507	Mitochondria kit	cells / tissues  mitochondria	native, detergent-free	25 ~ 30

P508	Plant total protein	plant tissues	➡	total protein	denatured/native	5 ~ 8
P510	Plant detergent-free	plant tissues	➡	total protein	native	6 ~ 8
P511	Plant chloroplast kit	plant tissues	➡	intact chloroplast		5
P518	Plant Microsomal Membrane	plant tissues	➡	microsomal membrane	native	1 hr
P512	Bacteria total protein	bacteria	➡	total protein	denatured	2 ~ 3
P513	Nuclear envelope kit	cells	➡	nuclear envelope	native	< 45
P514	Histone/DNA binding protein	cells	➡	histone & dna binding protein	denatured	< 10
P515	Thick cell wall microbes	microbes	➡	total protein	denatured / native	< 10
P516	Detergent-free thick cell wall	microbes	➡	total protein	denatured / native	10
P517	Yeast Mitochondria	yeast	➡	mitochondria	native	60
P518	Plant Microsomal Membrane	plant	➡	microsomal membrane	native	60
P519	Gel slice recovery kit	PAGE gel	➡	protein	denatured / native	10 ~ 20
P521	Hair & nail protein kit	hair, nail	➡	protein	denatured	5 min. hands on
P522	Adipose protein kit	adipose	➡	total protein	denatured / native	20
P523	Adipose fractionation	adipose	➡	water soluble/insoluble protein	native	40
P524	Nuclei isolation kit	cells / tissues	➡	intact nuclei	native, detergent-free	20
P525	FFPE protein kit	FFPE tissues	➡	protein	denatured	60
P528	Endosome isolation kit	cells / tissues	➡	endosome	denatured	20 min. hands on
P529	Adipose nuclei isolation kit	adipose tissues	➡	nuclei & cytosol	native	30

### Protein Analysis Reagents:

P5W1	HRP Substrate Kit	Pick up your most difficult-to-detect proteins	
P5W2	Antibody Enhancer	Save expensive antibodies	
P5W3	WB Stripping Solution	Maximum removal of antibodies, gentle on antigen	
P5W4	Ponceau S Stain	stain WB membrane for locating protein bands	
P5W5	Peroxidase Suppressor	inhibit endogenous peroxidase activity, avoid false	
P5W6	High Efficiency Protein Precipitation kit	precipitate protein in 25 minutes with high efficiency	
P5W7	Red Blood Cell Lysis Buffer	No damage on other nucleated cells.	
P5W8	WB Blocking Solution	block non-specific antibodies binding to WB membranes	
P5W9	Denaturing Protein Solubilization Reagent	dissolve protein pellets after protein extraction	
P5W10	Non-Denatured Protein Solubilization Reagent		
P5W11	Protein Solubilization Reagent for MS		
P5W12	SDS-Remover	Easy / rapid removal of SDS in solution by precipitation	
W0349	Protein A+G Agarose Beads	immunoprecipitation (IP) or co-immunoprecipitation	
W2200	Protease Inhibitor Cocktail (100x)	Protease Inhibitor Cocktail for use in protein extraction	