

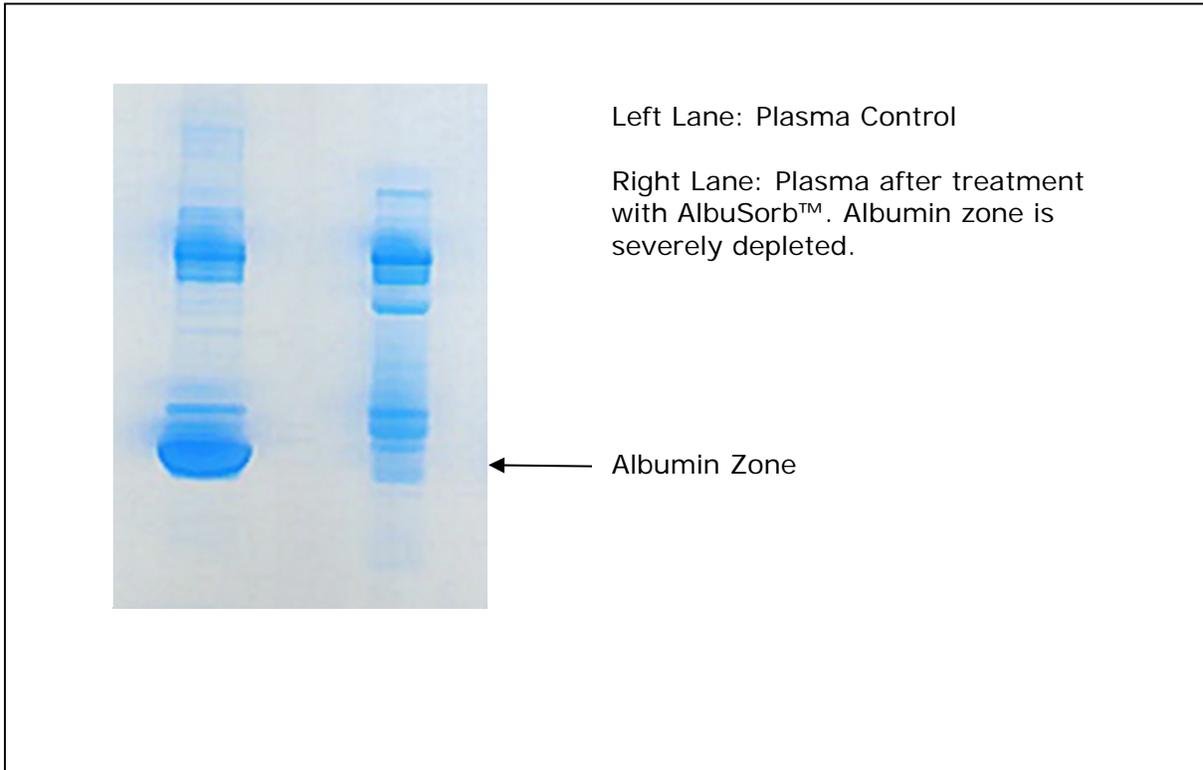
## AlbuSorb™

### *Albumin Depletion From Serum or Plasma*

- Removes 30 mg albumin/ml, >90%
- Affinity-type equivalence, virtually no cross-reactivity with other proteins
- Disposable, no column regeneration or cross-contamination
- Economical new surface technology, not based on affinity chromatography
- Mild elution maintains tertiary structure and simple transfer to secondary analysis
- The eluted fractions retain their enzymatic and biological activity
- Removes albumin from many species including human, sheep, bovine, mouse, goat, rat, and calf.

Poly-electrolytes are polymers with repeating units of stationary charges. AlbuSorb™ comes from a class of solid-phase, or surface-based, elastomeric poly-electrolytic surfaces that bind proteins through an empirically derived chemistry combining elements of polymer composition, cross-linking architecture and charge properties. As with bio-polymers like DNA and Heparin, governing their reactivity is the spatial presentation of the electrostatic groups along a flexible polymer chain. This same strategy was used in the creation of both Viraffinity™ and HemogloBind™.

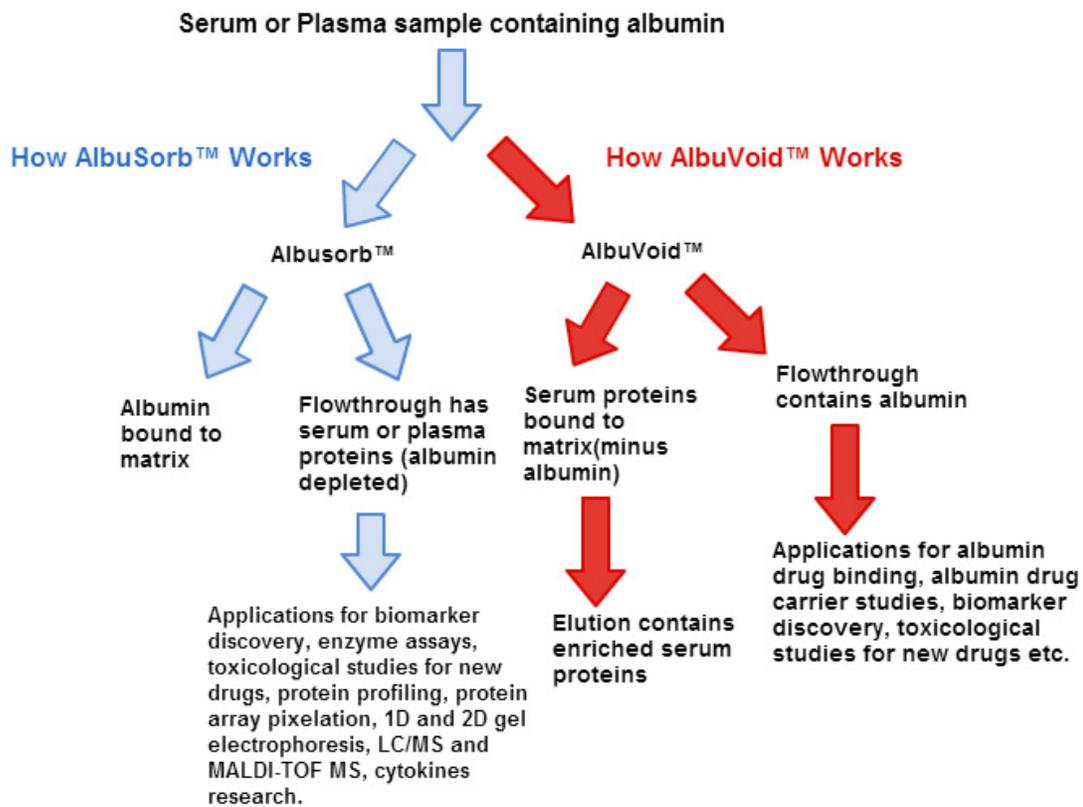
Unlike immuno-affinity, the surfaces utilized are disposable eliminating cycle to cycle variance and cross-contamination. AlbuSorb™ is supplied as a powder. Simply weigh, centrifuge and/or filter, and recover the albumin depleted serum in the supernatant.



Product	Size	Quantity of Serum Processed	Item No.	Price
AlbuSorb™	6 grams	4.3ml of Serum Samples	A185-6	
AlbuSorb™	18 grams	13 ml of Serum Samples	A185-18	

Items Required	Item No	Item No	Reagent
AlbuSorb™	A185-6 (6 grams)	A185-18 (18 grams)	Supplied
Binding Buffer BB1, PH 7.5	180 ml	540 ml	Supplied

## Depletion of albumin using Albusorb™ or Albuvoid™



### PROTOCOL – Based on processing 25 µl Serum

1. Weigh out 35 mg of AlbuSorb™ powder in a spin-tube/microfuge tube.
2. Add 400 µl of **Binding Buffer BB1** to condition the AlbuSorb™ powder. Shake it manually/vortex for 3 min and then centrifuge for 2 minutes at 3000 rpm. Discard the supernatant.
3. Repeat step-2
4. As a requirement for albumin binding, add 250 µl of the **BB1 Buffer** and then add 25 µl of the serum to **Step 3**. Mix for 10 minutes on a rotating shaker.

5. Centrifuge for 4 minutes at 10,000 rpm, **supernatant contains serum proteins minus albumin.**

6. Optionally the pellet (**mostly albumin**) can be eluted with 200 µl of **stripping buffer (0.2M Tris + 0.5M NaCl pH9.5 by mixing on a shaker for 10 min)** and centrifuge for 4 minutes at 10,000 rpm.

The protocol can be scaled up or down proportionally to adjust for different serum volumes. The surface amount can be adjusted to accommodate more or less albumin removal.

## References

### Cerebrospinal Fluid

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### Synovial fluid

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### Serum

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### Patent

Berggren, Per Olaf, Yang, Shao-Nian. 2012. [Methods For Treating And/Or Limiting Development Of Diabetes.](#)U.S. Patent 20120328630 Kind Code: A1, filed June 25, 2012, and issued December 27, 2012.



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