



BIOTECH SUPPORT GROUP

Sample Prep that Matters

Why Waste Time and Money Using Antibodies for Depletion?

Biotech Support Group helps enrich your proteome better.

Cost Effective & Efficient

Sample prep methods essential for expanding proteomic biomarkers into routine healthcare.

Knowledgebase of 1000+ Serum Proteins

Supports targeted & quantitative protein markers from serum/plasma.

Consumable Research Products

Supporting the expanding installation of LC-MS instrument & computational infrastructure.

Serves All Proteomic Analytical Platforms

Mass Spectrometry (LC-MS & MALDI),
Immunoassays, ELISAs & Western Blots,
1 & 2 DE,
Enzyme & Functional Assays

AlbuVoid™

An Albumin Depletion reagent kit. Selectively voids Albumin, binds to and enriches low abundance serum proteome.

AlbuSorb™

An Albumin Depletion reagent kit. Selectively binds Albumin, not based on blue-dye or immuno-affinity.

AlbuVoid™ Plus

An Albumin & IgG Depletion reagent kit. Combines optimized immobilized Protein A with AlbuVoid™ in seamless workflow.

AlbuSorb™ Plus

An Albumin & IgG Depletion reagent kit. Combines optimized immobilized Protein A with AlbuSorb™.

For more information on all of our Albumin & IgG Removal products, visit:

<https://www.biotechsupportgroup.com/Albumin-Removal-s/307.htm>

BSG's Albumin Removal Products in LC-MS Proteomic Analysis



Jing, Lun, et al. "PROTEOMIC ANALYSIS IDENTIFIED LBP AND CD14 AS KEY PROTEINS IN BLOOD/BIPHASIC CALCIUM PHOSPHATE MICROPARTICLE INTERACTIONS." *Acta Biomaterialia* (2021).

Here, in a LC-MS/MS proteomic study, the article describes use of **HemoVoid™** and **AlbuVoid™** prior to LC-MS analysis, "...After **albumin depletion**, analysis of the significant deregulated proteins showed that **27 signaling pathways significantly changed in blood cells...**"

Vialaret, Jerome & Kadi, Sarah & Tiers, Laurent & O Flynn, Robin & Lehmann, Sylvain & Hirtz, Christophe. (2018). Albumin depletion of human serum to improve quantitative clinical proteomics. *Current Topics in Peptide & Protein Research* 19. 53-62.

<http://www.researchtrends.net/tia/abstract.asp?in=0&vn=19&tid=26&aid=6192&pub=2018&type=3>. The article states "In comparison, methods using antibodies needed at least one-half day more. The albumin depletion method allowed to save precious time.". The authors concluded that the **AlbuVoid™ depletion method proved to be faster and more cost-effective than antibody based methods**, and could be helpful for biomarker enrichment and detection in medical research.

Jenull, Sabrina, et al. "The histone chaperone HIR maintains chromatin states to control nitrogen assimilation and fungal virulence." *Cell Reports* 36.3 (2021): 109406. The article states for "Cell-free supernatants from 16 hours YNB-BSA (0.025% BSA) cultures grown at 30°C were used for Mass-Spec analysis. Collected supernatants were lyophilized and dissolved in 400 µl of water for **AlbuVoid™** treatment for albumin depletion...**Albumin-free enriched secretory proteome** was eluted from beads".

A Preliminary Investigation Using Targeted LC-MS Proteomic Methods Demonstrates Unique Serum Profiles of Hospitalized SARS-CoV-2 Patients

<https://www.biotechsupportgroup.com/v/vspfiles/templates/257/pdf/ASMSBSGLFPoster.pdf>

For serum samples, targeted LC-MS is challenging, mainly due to the presence of highly abundant proteins. So it becomes critical to pair target peptides to sample depletion methods to best establish differentiated profiles between samples. In this preliminary investigation, we use **AlbuSorb™ PLUS** depletion methods to characterize the functionality of the innate immune response in hospitalized Covid-19 patients, more precisely than current methods.

BSG Application Report: **AlbuVoid™ PLUS & AlbuSorb™ PLUS** - Evaluating Different Windows of Observation Solves The Many Challenges of Serum Proteomics

<https://www.biotechsupportgroup.com/v/vspfiles/templates/257/pdf/PLUS%20Application%20Report%2007212019%20v1.pdf>

A complete list of Albumin Removal references can be found on our website at:
<https://www.biotechsupportgroup.com/References-s/138.htm#albumin-depletion>

RESEARCH TRENDS

Cell Reports

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2021
Poster

