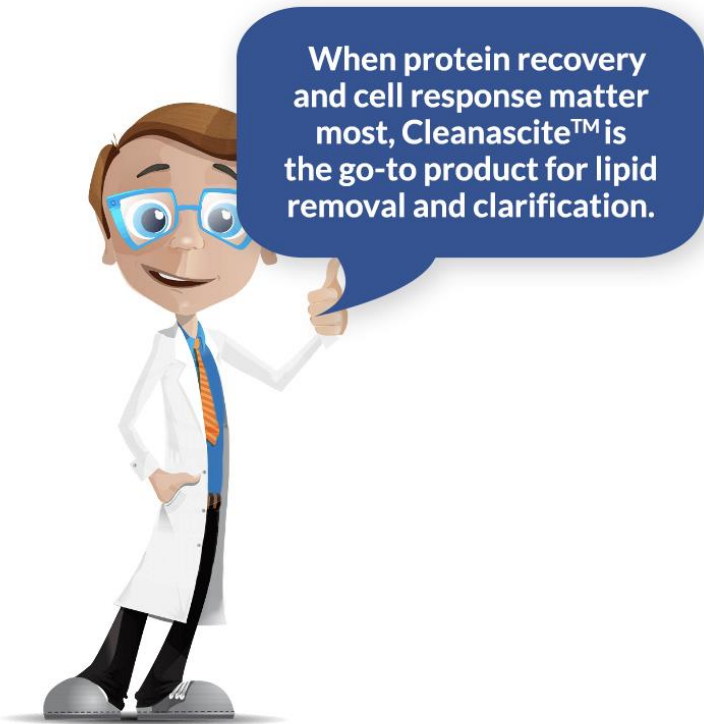




BIOTECH SUPPORT GROUP
Sample Prep that Matters

Lipid Removal & Clarification for the Most Challenging Applications



When protein recovery and cell response matter most, Cleanascite™ is the go-to product for lipid removal and clarification.

That's why it has been cited in over 70 references, more than any other product in these most demanding applications.


Unlike other solid-phases, Cleanascite™ does not have significant protein binding making its selectivity profile for lipids unique in the bio-research products industry. As a result, it is ideal to clear lipid associated matrix effects from human sera, bile, ascites, and other high lipid content sample types.

Removes Lipid Factors

- Phospho-Lipids
- >99% Cholesterol & Triglycerides
- Lipoproteins
- Extracellular Vesicles (Exosomes)

Cleanascite™

Solid-phase Aqueous Suspension
No Solvents, Freon or Chloroform
Standard Centrifuge (Not Ultra) Protocols
Safe Disposal



Improved Assay Performance

- ◆ ELISA
- ◆ Immuno-capture
- ◆ Microarrays
- ◆ LC-MS
- ◆ Cell Response



Cleanascite™ is derived through a proprietary formulation of metallic oxide derivatives. However, unlike other metallic oxides, **Cleanascite™** does not have significant protein binding, making its selectivity profile for lipids unrivaled in the bio-research products industry. As a result, it is ideal to clear lipid-associated matrix effects - including extracellular vesicles, which may influence quantification analysis and cell response assays.

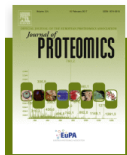
Key References



Plasma/Serum Protein Biomarkers The authors aimed at simultaneously measuring intact endogenous-insulin and derived C-peptide, to help predict development of diabetes mellitus, as well as in differential diagnosis in cases of hypoglycemia. Cleanascite™ is shown both to improve LC-MS measurements, and validated in accordance with CLIA '88 guidelines.
<https://www.sciencedirect.com/science/article/abs/pii/S0009898116300183>



Trypsin-digested Peptide Biomarkers The article states “Treatment of digested serum samples with two commercial lipid removal agents revealed variable effectiveness in reducing these artifacts, with one reagent (LRA; synthetic calcium silicate hydrate) revealing little to no effect...**Serum digests treated with the second reagent (Cleanascite™) demonstrated the absence of these artifacts**”.
<https://www.sciencedirect.com/science/article/pii/S1748013222001426>



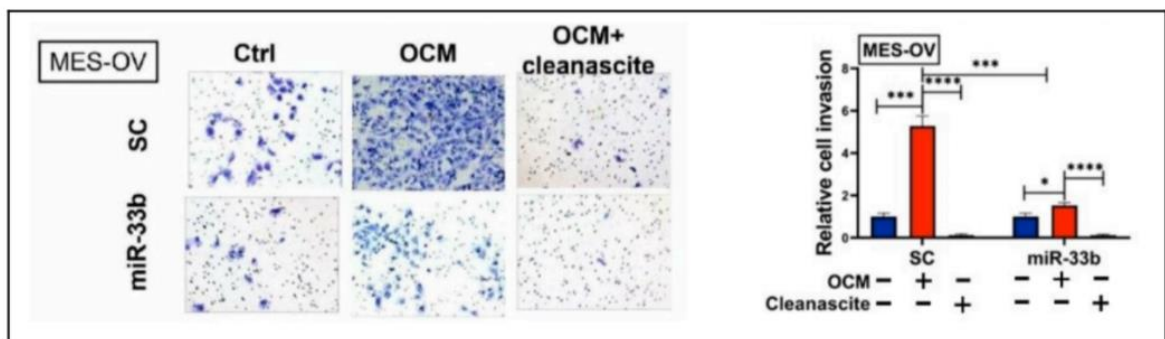
Bile Proteomics The authors report methods to overcome the biological variability of analyzing a high number of bile samples. They concluded that delipidation yielded a considerable number of complementary protein identifications and that **Cleanascite™ treatment was indispensable for in-solution digestion methods**.
<https://www.sciencedirect.com/science/article/abs/pii/S1874391916305024?via%3Dihub>

scientific reports

Depletion of Exosomes Offering a simple, efficient proteomic sample preparation technology for clearing lipid-associated macromolecules, the investigators explored the use of **Cleanascite™** to deplete extracellular vesicles. The article states "**Cleanascite-treatment of the secretome dramatically reduced ASC functional survival...**".
<https://www.tandfonline.com/doi/pdf/10.1080/20013078.2018.1463778?needAccess=true>



Lipid Factors and Cancer Cell Response To examine whether fatty acids in OCM are the main source of energy for tumors, all fatty acids in OCM were first removed by **Cleanascite™** Lipid Removal Reagent. XTT cell viability analysis was performed and showed that the cell growth rate of ES-2 and MES-OV cells was remarkably reduced when cocultured in lipid-depleted OCM and “both miR-33b overexpression and depletion of fatty acids by **Cleanascite in OCM significantly impaired ovarian cancer cell migration and invasion**.” <https://www.mdpi.com/2072-6694/13/19/4795/htm>



A complete list of **Cleanascite™** references can be found on our website at:
<https://www.biotechsupportgroup.com/References-s/138.htm#delipidation>

For more information on all of Cleanascite™, visit:
<https://www.biotechsupportgroup.com/Cleanascite-Lipid-Removal-Reagent-p/x2555.htm>