Cleanascite™
Lipid adsorption and clarification reagent

- A high binding capacity for lipids with minimal cross-reactivity with proteins
- Environmentally sound replacement for chlorinated/fluorinated hydrocarbons (eg. freon)
- Helps purify antibodies, recombinant proteins, nucleic acids, proteoglycans
- Ideal for clarifying ascites, serum, cell & tissue culture, bile and organ homogenates
- Clarifies saliva and fecal components
- Extensively cited in journal articles
- Does not bind to DNA, RNA
- Unreactive to serum components (such as hormones, nutrients, globulins, clotting factors, transport proteins)
- Extends the life of membrane and chromatographic columns.
- Ideal for delipidation treatments for downstream processing of large-scale therapeutic proteins, enzymes and monoclonal antibodies.

Cleanascite™ selectively removes lipids, cell debris, lipoproteins, floating fats, impurities from Cohn paste, transgenic milk, egg yolk and biological samples for pretreatment of samples prior to purification. The reagent is a solid-phase, non-ionic adsorbent supplied as a suspension in saline, ready for use. Simply add, centrifuge and/or filter. The clarified supernatant is ready for subsequent downstream processing or analysis.

Egg Yolk After (Left) and Before (Right) Treatment With Cleanascite™

Insert: PAGE showing Left: Markers Right: IgY and other major protein fractions recovered

Clarifies
- Ascites
- Serum/Plasma
- Bile
- Cohn Paste
- Cell Lysates
- Tissue Culture
- Organ Homogenates
- Saliva/Sputum
- Egg Yolk
- Transgenic Milk

in the purification and analysis of antibodies, proteins, nucleic acids, proteoglycans, and other macromolecules
**Protocol**

Supplied as an aqueous suspension of non-ionic adsorbent in saline, pH 8.0. When not in use, keep sealed. For best results store at 4°C. Do not freeze. Cleanascite™ retains full activity when stored as directed for at least 6 months.

<table>
<thead>
<tr>
<th>SAMPLE TYPE (partial list)</th>
<th>Volume Ratio, Cleanascite™ : Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>1 : 5 to 1 : 2</td>
</tr>
<tr>
<td>Ascites Fluid</td>
<td>1 : 4</td>
</tr>
<tr>
<td>Serum</td>
<td>1 : 4</td>
</tr>
<tr>
<td>Egg Yolk suspension</td>
<td>1 : 1 to 2 : 1</td>
</tr>
<tr>
<td>Tissue homogenates</td>
<td>1 : 4 to 1 : 2</td>
</tr>
<tr>
<td>Transgenic Milk</td>
<td>1 : 1</td>
</tr>
</tbody>
</table>

Actual lipid concentration in biological samples can vary greatly, so the ratios shown are only intended to provide general guidance in use.

1. Resuspend Cleanascite™ by gently shaking. Excessive shaking or mixing will cause foaming. It should be completely resuspended prior to use.

2. Add 1 ml of Cleanascite™ to 4 ml of the sample. (1 : 4 volume ratio). Mix the sample by gently shaking periodically for 10 minutes.

3. Centrifuge sample at 16,000 G’s for 1 minute - or - 1,000 G’s for 15 minutes.

4. Decant supernatant containing macromolecules of interest and continue with purification.

**Optimization.** Different sample volumes are easily scaled. Volume ratio can be adjusted up or down as required to remove the amount of impurities present.

*Based on Cleanascite™ to Sample typical volume ratio. Volume ratio may be adjusted according to lipid levels.

<table>
<thead>
<tr>
<th>Product</th>
<th>Size</th>
<th>Total Sample Volume That Can Be Processed*</th>
<th>Item No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleanascite™</td>
<td>10 ml</td>
<td>40 ml</td>
<td>X2555-10</td>
</tr>
<tr>
<td>Cleanascite™</td>
<td>50 ml</td>
<td>200 ml</td>
<td>X2555-50</td>
</tr>
<tr>
<td>Cleanascite™</td>
<td>100 ml</td>
<td>400 ml</td>
<td>X2555-100</td>
</tr>
<tr>
<td>Cleanascite™</td>
<td>1000 ml</td>
<td>4000 ml</td>
<td>X2555-100</td>
</tr>
</tbody>
</table>

*Based on Cleanascite™ to Sample typical volume ratio. Volume ratio may be adjusted according to lipid levels.
References

**Bile**


Hauser-Davis RA, Lima AA, Ziolli RL, Campos RC. *First-time report of metalloproteinases in fish bile and their potential as bioindicators regarding environmental contamination*. Aquatic Toxicology. 2012;110-111:99-106

Farina A, Dumonceau JM, Frossard JL. *Proteomic Analysis of Human Bile from Malignant Biliary Stenosis Induced by Pancreatic Cancer* Journal of Proteome Research. 2009; 8(1):159-69


**Egg Yolk**


**Biological Matrices**

Organ Homogenates


Cheng AM, Moore EE, Masuno T et al *Normal Mesenteric Lymph Blunts the Pulmonary Inflammatory Response to Endotoxin*. Journal of Surgical Research. 2006;136(S2):166-171

Red Blood Cells

Antunes RF; Brandao C; Maia M; Arosa FA. *Red blood cells release factors with growth and survival bioactivities for normal and leukemic T cells*. Immunology and Cell Biology. 2011;89(1):111-21

Tracheal Swab Samples


Tissue and Cell Culture

Alhamdani MS, Schroder C, Hoheisel JD. *Analysis conditions for proteomic profiling of mammalian tissue and cell extracts with antibody microarrays*. Proteomics. 2010;10(17):3203-7

Czambel RK, Kharlamov A, Jones SC. *Variations of brain endothelial nitric oxide synthase concentration in rat and mouse cortex*. Nitric Oxide. 2010;22(S1): 51-57
Plasma/Serum


Turner JD, Langley RS, Johnston KL. Wolbachia Lipoprotein Stimulates Innate and Adaptive Immunity through Toll-like Receptors 2 and 6 to Induce Disease Manifestations of Filariasis. The Journal of Biological Chemistry. 2009;284:22364-22378


Castro AR, Morrill We, Pope V. Lipid Removal from Human Serum Samples Clinical and diagnostic laboratory immunology.2000;7(2):197-199


Saliva

Lucy E. DesJardin Isolation of M. tuberculosis RNA from Sputum Methods in Molecular Medicine.2001;48:133-139

Beenhouwer DO, Shapiro S, Feldmesser M et al. Both Th1 and Th2 Cytokines Affect the Ability of Monoclonal Antibodies To Protect Mice against Cryptococcus neoformans Infection and immunity.2001;69: 6445-6455

**Patents**


**Vaccine Research (Cholesterol Removal From Human Serum)**


**Yeast assays**


**CONTACT US**

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