

## Bovine Serum Albumin

**Reagent Grade, Fatty Acid Free Powder**  
**Protease Free and Low Endotoxin**

### DESCRIPTION

Proliant Bovine Serum Albumin (BSA) is a high purity, lyophilized "Fraction V" powder derived from the plasma of USDA-inspected healthy animals from abattoirs located in the USA. The albumin is isolated from other plasma protein products and lipids by a unique proprietary, non-solvent procedure. The separation process includes a modified Cohn / heat-shock procedure designed to inactivate proteases and other potentially interfering enzymes. Further processing such as extensive membrane dialysis and filtration (including charcoal filtration), minimizes analytes including non-esterified fatty acids, that can cause background interference in sensitive in vitro diagnostic (IVD) assays as well as inhibition in sensitive cell and microbial culture systems. Typical purity levels are in excess of 99%. Proliant's Reagent Grade, Fatty Acid Free albumin product is ideal for the most sensitive diagnostic and research applications.

### APPLICATIONS

- Protease-sensitive Immunoassays such as RIA, EIA, Fluorescent and Chemiluminescent
- Protein Standard, Diluent
- Protein, Conjugate or Enzyme Stabilizer
- Hybridization, nucleic acid-based assays
- Fatty acid sensitive cell culture systems

### FEATURES / BENEFITS

- High Purity, Low Interference, Low Background
- Virtually No Detectable Protease Activity, Ensures Assay Integrity
- Origin Traceability to Facilitate Regulatory Approval
- "Closed Loop" Manufacturing\* – Minimizes Contamination and Maximizes Reproducibility.
- Superior Solubility/Filterability for Ease of Use
- Product Development and Technical Services designed for maximum responsiveness and flexibility
- Manufactured from USDA-inspected Bovine Plasma
- Manufactured According to FDA cGMPs.
- Validated for Prion (TSE) Clearance
- TSE Certificate of Suitability
- USDA/APHIS Registered for Shipment to the EU

### SCIENTIFIC ANALYSIS

	<u>Specification</u>	<u>Typical</u>
Protein (dry basis)	≥ 98.0%	> 99.0%
Purity (albumin)	≥ 98%	100%
Solubility (4% water)	Clear to slightly hazy	Clear to slightly hazy
Moisture	≤ 5.0%	< 2.0%
pH (10% water)	6.5 to 7.5	6.8 to 7.2
Ash	< 2%	1%
Protease	≤ 0.005 Units/mg	< 0.005 Units/mg
NEFA	< 0.01%	< 0.005%
Bovine IgG	Not Detected	Not Detected
Endotoxin	≤ 3 EU/mg	≤ 0.1 EU/mg
Heavy Metals (Pb)	≤ 10 ppm	< 1 ppm

Na, Cl, K, P, Ca are tested and can be reported on the Certificate of Analysis if requested.

### PHYSICAL CHARACTERISTICS

Proliant Bovine Serum Albumin is a highly soluble white to yellow with tan to green cast lyophilized powder. A solution of up to 30% in de-ionized water is clear to slightly hazy and virtually particulate-free.

### PACKAGING

Standard package size is 10 kg. Smaller sample sizes for evaluation are available.

### STORAGE RECOMMENDATIONS

Store sealed in a cool, dry environment for 3 years, and up to 5 years with re-qualification.

### ORDERING INFORMATION

Please order by product name "Bovine Serum Albumin, Reagent Grade Fatty Acid Free Lyophilized Powder" and refer to SKU # 68700.

\*Proliant's unique "Closed Loop" Manufacturing means that we collect only in exclusive abattoirs with our own USDA approved proprietary collection system. The material undergoes ante-and post-mortem inspection to ensure it is the highest edible grade before it is loaded directly into sealed tankers owned by Proliant. No other manufacturer can claim this important closed link, as they must buy their raw material from outside sources and the spot market.

What's more, from the time our product enters our tankers to the moment it is loaded into the dryers, the product is not exposed to the external environment. Once the raw material reaches our cGMP plant, the material is loaded directly into our process and manufactured through a series of closed tanks, lines, filters and separation equipment. In our plant there are no exposed filter presses or open tanks, nor is any non-food grade or noxious solvent material introduced into the process. There is also no possibility of contamination with other animal-derived products or bovine tissues in our completely dedicated facility.