

# Bovine Serum Albumin – Heat Shock, Low Endotoxin, pH 7.0

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|------------|----------|-------|
| CATALOG #: | 7922-5   | 5 g   |
|            | 7922-25  | 25 g  |
|            | 7922-100 | 100 g |

**SOURCE:** The raw material used to manufacture this lot was derived exclusively from USDA-regulated abattoirs located in the United States. The animals received ante-mortem and post-mortem inspection under a licensed veterinarian's supervision and were certified at the time of slaughter as free of infectious or contagious diseases and injurious parasites.

**PURITY:** ≥ 97% by SDS-PAGE analysis

**MOL. WEIGHT:** ~ 66.43 kDa

**FORM:** Off-white powder

**OTHER PARAMETERS:**

**Albumin Content:** ≥ 98% by electrophoresis.

**pH:** 7.0 ± 0.5

**Moisture:** ≤ 5.0%

**Heavy metals:** ≤ 20 ppm

**Ash:** ≤ 2%

**Endotoxin Content:** < 1.0 EU/mg

**SOLUBILITY:** ~ 50 mg/ml in water, with 15 min manual stirring.

**STORAGE CONDITIONS:** This BSA is stable for ≥ 5 years when stored at +5°C +/- 3°C in a sealed dry container.

**DESCRIPTION:** This BSA was purified by a proprietary heat shock process to inactivate proteases. Additional treatments include charcoal treatment, deionization and dialysis steps. BSA makes up approximately 60% of all proteins in animal serum. It is commonly used in cell culture protocols, particularly when protein supplementation is necessary and the other components of serum are unwanted. It aids in stabilization of enzymes and other proteins to prevent proteolysis and denaturation, especially when the proteins are present in low concentrations. In cell culture its main role is as a carrier of small molecules. Because of its negative charge, BSA binds water, salts, fatty acids, vitamins and hormones, then carries these bound components between tissues and cells. The binding

capacity also makes BSA an effective scavenger for removing toxic substances, including pyrogens, from the medium.

**APPLICATIONS/ADVANTAGES:**

- Used as a natural carrier protein for indigenous fatty acids, trace minerals and growth factors in cell culture where the endotoxin level is important.
- Ideal as a carrier of nutritional supplements in demanding serum-free and chemically defined cell and tissue cultures.
- Effective reagent to stabilize and dilute sensitive protein solutions.
- Also appropriate for diagnostic assays such as ELISA.

**RELATED PRODUCTS:**

- BSA – Cohn Fraction V, pH – 5.2 (**7904-5, 25, 100**)
- BSA – Cohn Fraction V, pH – 7.0 (**7905-5, 25, 100**)
- BSA – Cohn Fraction V, Immunoassay Grade, Protease Free, pH – 7.0 (**7906-5, 25, 100**)
- BSA – Cohn Fraction V, Fatty Acid Free, pH – 7.0 (**7907-5, 25, 100**)
- BSA – Cohn Fraction V, Fatty Acid Free, pH – 5.2 (**7908-5, 25, 100**)
- BSA – Cohn Fraction V, Endotoxin Low, pH – 7.0 (**7909-5, 25, 100**)
- BSA – Cohn Fraction V, Endotoxin Low, pH – 5.2 (**7910-5, 25, 100**)
- BSA – Cohn Fraction V, Immunoassay Grade, Protease Free, pH – 5.2 (**7911-5, 25, 100**)
- BSA – Cohn Fraction V, Fatty Acid Low, pH – 7.0 (**7912-5, 25, 100**)
- BSA – Cohn Fraction V, Fatty Acid Low, pH – 5.2 (**7913-5, 25, 100**)
- Bovine Serum Albumin – Fraction V, 30% Solution (**7914-100, 500**)
- BSA – Heat Shock, pH – 7.0 (**7915-5, 25, 100**)
- BSA – Heat Shock, pH – 5.2 (**7916-5, 25, 100**)
- BSA – Heat Shock, Reagent Grade pH – 7.0 (**7917-5, 25, 100**)
- BSA – Heat Shock, Diagnostic Grade pH – 7.0 (**7918-5, 25, 100**)
- BSA – Heat Shock, Protease Free pH – 7.0 (**7919-5, 25, 100**)
- BSA – Heat Shock, Protease DNASE Free pH – 7.0 (**7920-5, 25, 100**)
- BSA – Heat Shock, Fatty Acid Free pH – 7.0 (**7921-5, 25, 100**)
- BSA (10% in H<sub>2</sub>O) (**2119-10**)
- BSA Antibody (**5998-100**)
- AGE-BSA (**2221-10**)
- Glucose AGE-BSA (**2223-10**)
- Biotinylated BSA (Biotin-LC-BSA) (3 biotin/BSA) (**7097-5, 25**)
- Biotinylated BSA (Biotin-LC-BSA) (5 biotin/BSA) (**7098-5, 25**)
- Biotinylated BSA (Biotin-LC-BSA) (12 biotin/BSA) (**7099-5, 25**)

**FOR RESEARCH USE ONLY! Not to be used in humans.**