

Trade Name: Bovine Serum Albumin (BSA)

Revision: 001

Revision Date: 19 NOV 2025

Bovine Serum Albumin (BSA) – IVD Grade Analysis Certificate (COA)

Specification	Details
Product Name	Bovine Serum Albumin (BSA), IVD Grade
Source	Bovine serum
Purity	≥ 98% (confirmed by SDS-PAGE)
Appearance	White to off-white or pale yellow lyophilized powder
Physical Form	White to cream crystalline powder
Molecular Weight	~66 kDa
Formulation	Tris-based buffer containing sucrose and trehalose (for enhanced stability and assay performance)
Protease Activity	Not detected
DNase / RNase Activity	None detected
Endotoxin Level	≤ 1 EU/mg
Storage Conditions	2–8 °C, in a dry place, protected from light
Shelf Life	2 years under recommended storage conditions
CAS Number	9048-46-8
Intended Use	In Vitro Diagnostic (IVD) applications and laboratory use
Use Limitations	Not for injection, oral consumption, or therapeutic use in humans or animals

Description: Bovine Serum Albumin (BSA) IVD Grade is a highly purified bovine serum–derived protein with an approximate molecular weight of 66 kDa, specifically manufactured for **in vitro diagnostic and immunoassay applications**. This grade is produced through a controlled, GMP-oriented process to ensure consistent quality, batch-to-batch reproducibility, and suitability for diagnostic workflows. The product is supplied as a crystalline, lyophilized powder formulated with **Tris buffer, sucrose, and trehalose**, providing enhanced protein stability during storage and reconstitution, as well as optimal performance in immunological assays. Protease, DNase, and RNase activities are effectively eliminated, and endotoxin levels are tightly controlled (≤ 1 EU/mg), making this BSA suitable for sensitive diagnostic applications. IVD Grade BSA is widely used as a **blocking agent in immunoassays such as ELISA**, as a stabilizer in diagnostic reagents, and as a component of assay buffers and media preparation. The product retains its native structure and functional properties after lyophilization and reconstitution, delivering performance comparable to leading international diagnostic-grade BSA products. This grade is intended **exclusively for in vitro diagnostic and laboratory use** and is not suitable for injectable, oral, or therapeutic applications.

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Bovine Serum Albumin (BSA) – Cell Culture Grade Certificate of Analysis (COA)

Specification	Details
Product Name	Bovine Serum Albumin (BSA), Cell Culture Grade
Source	Bovine Serum
Purity	≥ 99% (confirmed by SDS-PAGE)
Appearance	White to off-white lyophilized powder
Physical Form	homogeneous lyophilized powder
Molecular Weight	~66.4 kDa
Formulation	Optimized low-salt buffer with proprietary stabilizers (pH 5.2 formulation for enhanced cellular compatibility)
Protease Activity	Not detected
DNase / RNase Activity	None detected
Endotoxin Level	≤ 0.1 EU/mg (LAL method)
Mycoplasma	Negative
Viral Contamination	Tested negative for relevant bovine viruses
Native Structure	Preserved (full biological functionality after reconstitution)
Storage Conditions	2–8°C, in a dry place and protected from light
Shelf Life	2 years under recommended storage conditions
CAS Number	9048-46-8
Intended Use	Cell culture and tissue culture applications

Product Description: Highly purified (≥99%) native BSA produced via a localized, GMP-oriented industrial process. Designed specifically for cell and tissue culture applications. Features ultra-low endotoxin levels, complete removal of interfering globulins, lipids, and proteases, and a proprietary pH 5.2 formulation that enhances protein stability in acidic culture environments and reduces cellular oxidative stress. Acts as a nutritional supplement and protective agent in media such as DMEM, RPMI, serum-free and specialized culture media; supports cell viability, preserves morphology, inhibits apoptosis, and functions as a carrier for fatty acids and small molecules. Performance is equivalent or superior to leading international brands, serving as a direct domestic substitute for imported products.

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Bovine Serum Albumin (BSA) – Standard Grade Certificate of Analysis (COA)

Specification	Details
Product Name	Bovine Serum Albumin (BSA), Standard Grade
Source	Bovine serum
Purity	≥ 96% (confirmed by SDS-PAGE)
Appearance	White to pale yellow lyophilized powder
Physical Form	Crystalline or fine homogeneous powder
Molecular Weight	~66.4 kDa
Formulation	Low-salt formulation with proprietary in-house developed stabilizers (available in pH 5.2 and pH 7.0 formulations)
Protease Activity	Not detected or very low
DNase / RNase Activity	None detected
Endotoxin Level	≤ 1 EU/mg (LAL method)
Storage Conditions	2–8 °C, in a dry place, protected from light
Shelf Life	2 years under recommended storage conditions
CAS Number	9048-46-8
Intended Applications	Protein standard for concentration assays (Bradford, BCA, Lowry), blocking agent in Western blotting, buffer supplementation, enzymatic assay standardization, and general laboratory research
Regulatory Status	Research Use Only (RUO)
Use Limitations	Not suitable for sensitive cell culture applications, IVD use, or human/veterinary therapeutic purposes

Product Description: Bovine Serum Albumin (BSA) Standard Grade produced by Nozhan Zist Fanavaran Co. is a purified bovine serum-derived protein (≥96%) manufactured through a localized, GMP-oriented industrial process. This grade features controlled endotoxin levels, effective removal of interfering proteases and lipids, and dual pH formulation options (5.2 and 7.0), ensuring broad compatibility with common laboratory and research workflows. The product retains its native structure and appropriate biological functionality following lyophilization and reconstitution, delivering performance comparable to or exceeding that of leading international brands. It serves as a reliable domestic alternative to imported BSA for academic, research, and biotechnology laboratories.



Analysis certificate

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