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A9647 ▶ **Sigma-Aldrich®**

Bovine Serum Albumin

★★★★★ (0)

heat shock fraction, pH 7, ≥98%

Synonym(s):

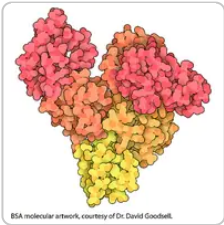
Albumin bovine serum, BSA, Bovine albumin

CAS Number: **9048-46-8**
EC Number: **232-936-2**
MDL number: **MFCD00130384**
NACRES: NA.27

SKU	Pack Size	Availability	Price	Quantity
A9647-10G	10 G	✓ Only 2 left in stock (more on the way) Details...	€70.10	<div> <div>–</div> <div>+</div> <div>📘</div> </div>
A9647-50G	50 G	✓ Available to ship on October 10, 2022 Details...	€206.00	<div> <div>–</div> <div>+</div> <div>📘</div> </div>
A9647-100G	100 G	✓ Estimated to ship on November 01, 2022	€335.00	<div> <div>–</div> <div>+</div> <div>📘</div> </div>
A9647-500G	500 G	✓ Estimated to ship on October 28, 2022	€1,390.00	<div> <div>–</div> <div>+</div> <div>📘</div> </div>
A9647-1KG	1 KG	✓ Available to ship on October 10, 2022 Details...	€2,320.00	<div> <div>–</div> <div>+</div> <div>📘</div> </div>

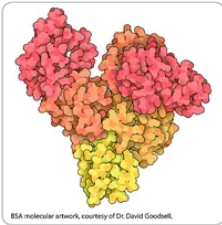
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RECOMMENDED PRODUCTS



Sigma-Aldrich
A7906
Bovine Serum Albumin
heat shock fraction, pH 7, ≥98%

[View Price and Availability](#)



Sigma-Aldrich
A7030
Bovine Serum Albumin
heat shock fraction, protease free, fatty acid free, essentially globulin free, pH 7, ≥98%

[View Price and Availability](#)

PROPERTIES

biological source	bovine
Quality Level	300
assay	≥98%
form	lyophilized powder
mol wt	~66 kDa
purified by	heat shock fractionation

origin	USA origin
technique(s)	immunocytochemistry: suitable
loss	≤5%
pH	7
solubility	water: soluble (40 mg/ml)
UniProt accession no.	P02769
storage temp.	2-8°C
Gene Information	bovine ... ALB(280717)

Looking for similar products? Visit [Product Comparison Guide](#)

Related Categories

[Albumins and Transport Proteins](#)

DESCRIPTION

General description

Bovine serum albumin is a protein whose key biological function is to regulate the colloidal osmotic pressure of blood. BSA is widely used in various studies and applications. Made up of 583 amino acids, BSA is a water-soluble protein with a calculated molecular weight of 66,430

Da. Six α -helices form three homologous domains of BSA. Depending on pH, it undergoes reversible conformational isomerization. The native structure of the protein becomes reactive and flexible on heating.

Application

Bovine Serum Albumin is used for many applications, including the following applications:

- BSA has been used in cell culture, e.g. as a supplement in media prepared for culturing of oligodendrocytes.
- BSA has been used for the dilution of primary antibody solution in immunohistochemistry procedures.
- BSA has been used as a standard in the Bradford method of protein quantification.
- BSA has been used in blocking and permeabilization buffer for immunofluorescence studies.

Packaging

10, 50, 100, 500 g in poly bottle

1 kg in poly bottle

Biochem/physiol Actions

Certain conformational and primary-sequence epitopes of BSA are suspected allergens in human beef and milk allergies.

Preparation Note

Prepared using heat shock fractionation

Serum albumin may be referred to as Fraction V. This naming convention is taken from the original Cohn method of fractionating serum proteins using cold ethanol precipitation. Serum albumin was found in the fifth ethanol fraction using Cohn's method. Since then, the term "Fraction V" has been used by some to describe serum albumin regardless of the method of preparation. Others have used this term to describe serum albumin purified by ethanol fractionation methods that have been highly modified since the original Cohn method was described. Sigma-Aldrich manufactures and distributes serum albumins purified from a variety of primary methods including the true Cohn

fractionation method, modified ethanol fractionation methods, heat shock and chromatography. Additional purification steps may include crystallization or charcoal filtration.

RELATED PRODUCTS

Also Commonly Purchased With This Product

D2650

Dimethyl sulfoxide, Hybri-Max™, sterile-filtered, BioReagent, suitable for hybridoma, ≥99.7%

[View Pricing](#)

T1503

Trizma® base, Primary Standard and Buffer, ≥99.9% (titration), crystalline

[View Pricing](#)

Z370398

Carestream® BioMax® light film

[View Pricing](#)

F1051

Fetal Bovine Serum, Canada origin, sterile-filtered, suitable for cell culture

[View Pricing](#)

SAFETY INFORMATION

Storage Class Code

11 - Combustible Solids

WGK

WGK 3

Flash Point(F)

Not applicable

Flash Point(C)

Not applicable

Personal Protective Equipment

dust mask type N95 (US),

[Eyeshields](#), [Gloves](#)

DOCUMENTATION

Certificate of Analysis

Enter Lot Number to search for Certificate of Analysis (COA).

Lot Number

e.g. 023J5431

How to enter Lot Number (COA)**Search****Certificate of Origin**

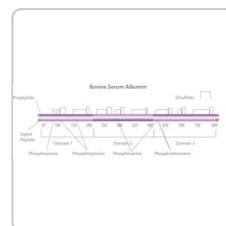
Enter Lot Number to search for Certificate of Origin (COO).

Lot Number

e.g. 023J5431

How to enter Lot Number (COO)**Search****Product Information Sheet****Product Information Sheet - A9647****SDS****CUSTOMERS ALSO VIEWED**

Roche

BSAVHS-RO**Bovine Serum Albumin Fraction V, heat shock**
from bovine serum**View Price and Availability**

Sigma-Aldrich

A3311**Bovine Serum Albumin**
powder, BioXtra**View Price and Availability****FREQUENTLY ASKED QUESTIONS**

Which document(s) contains shelf-life or expiration date information for a given product?

If available for a given product, the recommended re-test date or the expiration date can be found on the Certificate of Analysis.

How do I get lot-specific information or a Certificate of Analysis?

The lot specific COA document can be found by entering the lot number above under the "Documents" section.

What is the molecular weight of Product A9647, Albumin from bovine serum?

The molecular weight of BSA is 66,430.

How can the concentration of a solution of Product A9647, Albumin from bovine serum, be quantified?

The concentration of a solution of BSA can be measured by using the extinction coefficient (E1%) of 6.67. The 1% refers to a solution that is 1% weight-to-volume (i.e., 10 mg/mL).

What is the pH of a solution of Product A9647, Albumin from bovine serum?

The pH of a 1% solution is approximately 7.0, according to the product specifications.

How do I find price and availability?

There are several ways to find pricing and availability for our products. Once you log onto our website, you will find the price and availability displayed on the product detail page. You can contact any of our Customer Sales and Service offices to receive a quote. USA customers: 1-800-325-3010 or view [local office numbers](#).

What is the Department of Transportation shipping information for this product?

Transportation information can be found in Section 14 of the product's (M)SDS. To access the shipping information for this material, use the link on the product detail page for the product.

My question is not addressed here, how can I contact Technical Service for assistance?

Ask a Scientist [here](#).

PEER REVIEWED PAPERS

E-cadherin, MMP-2, and MMP-9 as prognostic markers in penile cancer: analysis of 125 patients.

Campos RS et al.

Urology, 67, 797-797 (2006)

Characterization of an Exo-beta-1,3-Glucanase Produced by Pichia anomala Strain K, Antagonist of Botrytis cinerea on Apples.

Jijakli MH et al.

Phytopathology, 88, 335-335 (1998)

Down-regulation of seladin-1 increases BACE1 levels and activity through enhanced GGA3 depletion during apoptosis.

Sarajarvi T et al.

The Journal of Biological Chemistry, 284, 34433-34433 (2009)

Amino acid supplementation of a simple inorganic salt solution supports efficient in vitro maturation (IVM) of bovine oocytes.

Mohammad Bahrami et al.

Scientific reports, 9(1), 11739-11739 (2019-08-15)

Defining oocyte in vitro maturation (IVM) conditions allows for improved reproducibility and efficiency of bovine embryo production. IVM conditions for bovine oocytes have been extensively studied, but beneficial effects of individual supplements remain controversial. This study compared methods of cumulus

Rapid confirmation and revision of the primary structure of bovine serum albumin by ESIMS and Frit-FAB LC/MS.

Hirayama K et al.

Biochemical and Biophysical Research Communications, 173, 639-646 (1990)

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PROTOCOLS AND ARTICLES

Articles

Colorimetric Detection of Western blot using 4-Chloro-1-Naphthol Solution Protocol

This solution is used as a substrate for detecting horseradish-peroxidase conjugates in Western blotting.

Fast Analysis of Monoclonal Antibodies Using Silica Monoliths Designed for Bioanalysis

Silica monoliths with larger mesopores are a powerful tool for the fast separation of biomolecules including mAbs. The immobilization of protein A on epoxy-modified widepore (WP) silica rods enabled highly reproducible and fast, one minute, separations of mAbs. The Chromolith® WP 300 is also available with a...

Albumin in Cell Culture

This page segues to comprehensive insights on how serum albumin and other important cell culture components affect the performance of serum-free cell culture systems used for biomanufacturing heterologous proteins including monoclonal antibodies. The page introduces the in vitro chemistry and...

Protocols

Enzymatic Assay of Alcohol Dehydrogenase (EC 1.1.1.1)

To measure alcohol dehydrogenase activity, this assay uses β -nicotinamide adenine dinucleotide phosphate and a continuous spectrophotometric rate determination at 340 nm.

Immunohistochemistry Procedure

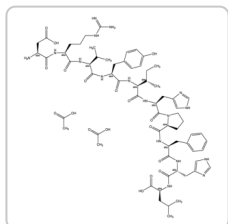
Use this protocol to for the entire immunohistochemistry (IHC) procedure through staining and visualization of specific antigens in paraffin-embedded tissue sections.

Related Content

Preparation & Staining of 3D Printed Tissues & Scaffolds

Three-dimensional (3D) printing of biological tissue is rapidly becoming an integral part of tissue engineering.

RECENTLY VIEWED PRODUCTS

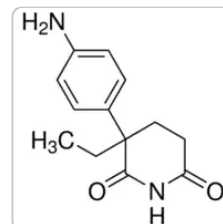


Sigma-Aldrich

A9650

Angiotensin I human acetate salt hydrate
≥90% (HPLC)

[View Price and Availability](#)



Sigma-Aldrich

A9657

DL-Aminoglutethimide

[View Price and Availability](#)

Reviews



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Questions

[Be the first to ask a question](#)

TECHNICAL SERVICE

Our team of scientists has experience in all areas of research including Life Science, Material Science, Chemical Synthesis, Chromatography, Analytical and many others.

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