

POWDER & SOLUTION **BSA**

2009/10



Animal sera & plasma / Antibodies / Antigens / Biochemicals / Bovine & other animal albumins / Bovine & other animal proteins / Flow cytometry conjugates / FRET conjugates / Glycobiology reagents / Liquid stable substrates / Molecular biology research products

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■ QUALITY AND USES

QUALITY

Europa Bioproducts offers a wide range of heat-shock and cold ethanol processed animal serum albumins.

With our high purity albumins, researchers can formulate and customize their own specialized media for specific applications.

Our albumins are especially useful for creating defined serum-free or serum-reduced mixtures from basal media, reducing shear in bioreactor systems, and binding non-specific toxic compounds.

Europa Bioproducts offers albumins as a powder as well as a sterile solution.

All of our BSA is certified US origin and produced under cGMPs, in a USDA certified plant and have a Certificate of Suitability issued by the EDQM

Europa Bioproducts is a Defra audited facility for the import of category 3 animal-by-products and inspected annually for compliance with the EU regulation 1774/2002.

USES OF BOVINE SERUM ALBUMIN

Cohn V Cold processed Bovine Serum Albumin

- Used in cell culture studies where a protein source is needed.
- A good carrier of growth factors.
- Used as a carrier protein in protein-protein coupling.
- Used in vaccine preparations as a protein stabilizer.

Heat Shock processed Bovine Serum Albumin

- Heat shock bovine serum albumin can be used as a stock protein source.
- Used as a diluent or blocker in immunoassays (e.g. ELISA, RIA, and immunoblots).
- Source of pure protein that is free of DNase, RNase and protease activity.
- Used as a carrier protein in protein-protein coupling.
- Used as a molecular weight marker protein.
- Used in vaccine preparations as a protein stabilizer.

BOVINE SERUM ALBUMIN

Our most popular Albumins and the recommended uses.

	Protease Free Powder	Low Endotoxin Powder	Reagent Pure Powder (pH 7.0)	Standard Powder (pH 5.2)	Standard Powder (pH 7.0)	Cohn Fraction V (pH 5.2)	Cohn Fraction V (pH 7.0)	Microbiological Grade Powder
	BAH65	BAH	BAH64	BAH63	BAH62	BAC63	BAC62	BAC61
Culture Media Animal/Insect Cells		⊗				⊗	⊗	⊗
Culture Media Microbes		⊗				⊗	⊗	⊗
Stabilizing/Enhancing Diluent In: Enzyme Systems	⊗		⊗	⊗	⊗			
Immunohematology	⊗		⊗	⊗	⊗			
Serology			⊗	⊗	⊗	⊗	⊗	
RIA systems	⊗		⊗					
Blood Banking Reagents	⊗		⊗	⊗	⊗	⊗	⊗	
Binding and Transport studies	⊗		⊗	⊗	⊗	⊗	⊗	
Protein base Or Filler			⊗	⊗	⊗	⊗	⊗	
Protein Supplement control			⊗	⊗	⊗	⊗	⊗	
Protein Standard (MW, Amino acids and Nitrogen)			⊗					
In ELISA (blocks non-specific binding)	⊗		⊗					
As Carrier Protein for Haptens			⊗	⊗	⊗	⊗	⊗	

■ PRODUCTS

- **Low Endotoxin Powder:** Ideal for Cell culture and Vaccine production. Ideal as supplement for your cell culture as it contains very low levels of endotoxin and IgG.
- **Diagnostic Grade Powder:** Diagnostic Grade Powder is designed to minimize analytes that cause background interference and those that cause inhibition in cell culture systems. The product contains low or non-detectable levels of endotoxin, bioburden and Bovine IgG.
- **Fatty Acid Free Powder:** Minimises the interference in hormone and cholesterol assays.
- **Reagent Pure Powder:** for use in ELISA, RIA, and Immunoblots. The ideal blocking agent for immunoassays to minimize non specific binding.
- **Cohn Fraction V Powder:** Prepared by cold ethanol plasma fractionation process. Rich in lipids and cofactors for tissue culture work.

- **BSA Solutions:** Isotonic sterile 30% solution prepared from Cohn Fraction V powder or prepared from heat-shock BSA. Available with or without preservative.

KEY BENEFITS OF ALL OUR ALBUMINS

- High purity and consistency
- Manufactured from USDA-inspected Bovine Plasma
- Certificate of suitability issued by EDQM
- Lyophilized and liquid preparations
- Cold Ethanol and Heat Shock preparations

BOVIN SERUM ALBUMIN POWDER

COHN FRACTION V MICROBIOLOGY GRADE EQBAC61

METHOD OF PURIFICATION

By a proprietary modified cold ethanol process.

ADVANTAGES

Processed under cold non-denaturing conditions without using many of the chemicals that are used in other processes. It is available at a pH of 7.0.

USES

Can be used as a serological diluent, as a molecular weight standard, and as a growth nutrient in tissue culture.

STABILITY AND STORAGE

5 years at +5°C +/-3°C in sealed dry containers.

STANDARD PACK SIZES

Bottles: 50g, 100g, 500g, 1kg (2x500g). Bags: 5kg.

SPECIFICATIONS

Appearance	Powder
Color.....	Off shade white
Moisture	max. 5.0%
Ash.....	max. 2.0%
pH	6.8 - 7.2
Heavy Metals	max. 20 ppm
Albumin	min. 95%
Solubility (A 550nm)	0.15
Protein.....	min. 95%

BOVIN SERUM ALBUMIN POWDER

COHN FRACTION V EQBAC62 (PH7) OR EQBAC63 (PH5)

METHOD OF PURIFICATION

By a proprietary modified cold ethanol process.

ADVANTAGES

Processed under cold non-denaturing conditions without using many of the chemicals that are used in other processes. Fatty acids and native sialic acids are preserved in the BSA. It is available at pH 5.2 or neutralized to a pH of 7.0.

USES

Can be used as a serological diluent, as a molecular weight standard, and as a growth nutrient in tissue culture.

STABILITY AND STORAGE

5 years at +5°C +/-3°C in sealed dry containers.

STANDARD PACK SIZES

Bottles: 50g, 100g, 500g, 1kg (2x500g). Bags: 5kg.

SPECIFICATIONS

AppearancePowder
Color..... Off shade white
Moisturemax. 5.0%
Ash.....max. 2%
pH (1% solution in 0.15M NaCl).....5.0 -5.4
OR
pH (1% solution in 0.15M NaCl).....6.8 - 7.2
Heavy Metals max. 20 ppm
Albumin (electrophoresis).....min. 96%
Solubility (A 550nm)0.15
Protein.....min. 96%

BOVIN SERUM ALBUMIN POWDER

COHN FRACTION V PROTEASE-FREE EQBAC65 (PH7) OR EQBAC66 (PH5)

METHOD OF PURIFICATION

By a proprietary modified cold ethanol process.

ADVANTAGES

This product is processed under cold non-denaturing conditions without many chemicals that are used in other processes. Product has non-detectable levels of residual protease by our test methods. Other enzyme activities are very low in this very pure product.

USES

Can be used in RIA and ELISA

STABILITY AND STORAGE

5 years at +5°C +/-3°C in sealed dry containers.

STANDARD PACK SIZES

Bottles: 50g, 100g, 500g, 1kg (2x500g). Bags: 5kg.

SPECIFICATIONS

AppearancePowder
Color..... Off shade white
Moisturemax. 5.0%
Ash.....max. 2%
pH (1% solution in 0.15M NaCl).....5.0 -5.4
OR
pH (1% solution in 0.15M NaCl).....6.8 - 7.2
Heavy Metals max. 20 ppm
Albumin (electrophoresis).....min. 98%
Solubility (A 550nm)0.15
Protein.....min. 96%
Protease..... not detected
IgG not detected

BOVIN SERUM ALBUMIN POWDER

HEAT SHOCK STANDARD GRADE EQBAH62 (PH7) OR EQBAH63 (PH5)

METHOD OF PURIFICATION

By a proprietary heat shock process.

ADVANTAGES

Ultra pure standard powder is available at a pH of 5.2 or neutralized to a pH of 7.0

USES

Nutrient and tissue culture media or as a protein standard.

STABILITY AND STORAGE

5 years at +5°C +/-3°C in sealed dry containers.

STANDARD PACK SIZES

Bottles: 50g, 100g, 500g, 1kg (2x500g). Bags: 5kg.

SPECIFICATIONS

Appearance Powder
Color..... Off white – Light brown
Moisture max. 5.0%
pH (1% solution in 0.15M NaCl)..... 5.0 – 5.4
OR
pH (1% solution in 0.15M NaCl)..... 6.8 – 7.2
Heavy Metals max. 20 ppm
Albumin (electrophoresis)..... min. 96%
Solubility (A 550nm) 0.30
Protein..... min. 96%

BOVIN SERUM ALBUMIN POWDER

HEAT SHOCK REAGENT GRADE EQBAH64

METHOD OF PURIFICATION

By a proprietary heat shock process.

ADVANTAGES:

Reagent grade BSA has a higher purity levels than the standard powders of Cohn Fraction V material. It is negative for globulins that may interfere in your assay.

USES:

It is excellent as a nutrient in tissue culture or as a reagent protein standard.

STABILITY AND STORAGE

5 years at +5°C +/-3°C in sealed dry containers.

STANDARD PACK SIZES

Bottles: 50g, 100g, 500g, 1kg (2x500g). Bags: 5kg.

SPECIFICATIONS

Appearance Powder
Color Off shade white
Moisture max. 5%
Ash max. 2%
pH 6.8 – 7.2
Heavy Metals max. 10 ppm
Albumin min. 98%
Solubility (A 550nm) 0.20
Protein min. 96%
IgG not detected

BOVIN SERUM ALBUMIN POWDER

HEAT SHOCK PROTEASE FREE EQBAH65

METHOD OF PURIFICATION

By a proprietary heat shock process.

ADVANTAGES

Protease Free Powder has non-detectable levels of residual protease activity by our test methods. Other enzyme activities are very low in this ultra pure product.

USES

Excellent in RIA and ELISA and as a diluent or blocking agent.

STABILITY AND STORAGE

5 years at +5°C +/-3°C in sealed dry containers.

STANDARD PACK SIZES

Bottles: 50g, 100g, 500g, 1kg (2x500g). Bags: 5kg.

SPECIFICATIONS

Appearance	Powder
Color.....	Off shade white
Moisture	max. 5.0%
Ash.....	max. 2.0%
pH	6.8 – 7.2
Heavy metals	max. 10 ppm
Albumin	min. 98%
Solubility (A 550nm)	0.15
Protein.....	min. 96%
Protease.....	not detected
IgG	not detected

BOVIN SERUM ALBUMIN POWDER

HEAT SHOCK FATTY ACID FREE EQBAH66

METHOD OF PURIFICATION

Heat shock fractionation and proprietary steps to ensure a low level of fatty acids.

ADVANTAGES

This powder has a very low level of free fatty acids (0.02%), is priced economically, and is readily soluble.

USES

This material is normally used in serum free media as a carrier protein for trace elements, fatty acids, hormones and growth factors.

STABILITY AND STORAGE

5 years at +5°C +/-3°C in sealed dry containers.

STANDARD PACK SIZES

Bottles: 50g, 100g, 500g, 1kg (2x500g). Bags: 5kg.

SPECIFICATIONS

Appearance.....	Powder
Color.....	Off-white
Moisture	max. 5.0%
Ash.....	max. 3.0%
pH	6.5 – 7.5
Albumin	min. 98%
Protein.....	min. 96.0%
Free fatty acid	max. 0.02%

BOVIN SERUM ALBUMIN POWDER

HEAT SHOCK PROTEASE, DNASE, RNASE FREE EQBAH67

METHOD OF PURIFICATION:

Proprietary heat shock process.

ADVANTAGES:

RNase, DNase, protease free powder has non-detectable levels of residual RNase, DNase and protease activity by our test methods.

USES:

Excellent for use in RIA and ELISA and as a diluent or blocking agent or for molecular biology applications.

STABILITY AND STORAGE

5 years at +5°C +/-3°C in sealed dry containers.

STANDARD PACK SIZES

Bottles: 50g, 100g, 500g, 1kg (2x500g). Bags: 5kg.

SPECIFICATIONS

Appearance	Power
Color.....	Off shade white
Moisture	max. 5.0%
Ash.....	max. 2.0%
pH	6.7 – 7.3
Heavy metals	max. 20 ppm
Albumin (electrophoresis).....	min. 98%
Solubility (A 550nm)	0.15
Protein.....	min. 96%
RNase	not detected
DNase	not detected
Protease.....	not detected
IgG	not detected

BOVIN SERUM ALBUMIN POWDER

DIAGNOSTIC GRADE POWDER EQBAH68

METHOD OF PURIFICATION

Product is made by a modified, proprietary heat-shock method to inactivate proteases. The product is further processed to remove lipids and other plasma proteins by a non solvent procedure.

ADVANTAGES

This diagnostic grade powder is designed to minimize analytes that causes background interference and those that cause inhibition in cell culture systems. The product contains low or non-detectable levels of endotoxin and Bovine IgG.

USES

This can be used as a protein standard, diluent, conjugate or enzyme stabilizer. It is also used for high-sensitivity immunoassays, cell culture and hybridization studies.

STABILITY AND STORAGE

5 years +5° C +/- 3°C in sealed dry containers.

PACK SIZES

Bottles: 50g, 100g, 500g, 1kg (2x500g). Bags: 5kg.

SPECIFICATIONS

Appearance	Lyophilized powder
Color.....	Off-white to tan
Moisture	max. 5.0%
Ash.....	max. 3.0%
pH	6.5 – 7.5
Heavy Metals	max. 20 ppm
Albumin (electrophoresis).....	min. 98.0%
Protein.....	min. 98.0%
IgG	not detected
Protease.....	not detected
Endotoxin	max. 3.0 EU/mg

BOVIN SERUM ALBUMIN POWDER

HEAT SHOCK LOW ENDOTOXIN EQBAH

METHOD OF PURIFICATION

Proprietary heat shock process. Additional treatments include charcoal treatment, deionization and dialysis steps.

ADVANTAGES

Low Endotoxin BSA has very low levels of endotoxins. It is available in large batch sizes.

USES

It is used as a natural carrier protein for indigenous fatty acids, trace minerals and growth factors in cell culture where the endotoxin level is important.

STABILITY AND STORAGE

5 years at +5°C +/-3°C in sealed dry containers.

PACK SIZES

Bottles: 50g, 100g, 500g, 1kg (2x500g). Bags: 5kg.

SPECIFICATIONS

Appearance.....Powder
Color.....Off white
Moisturemax. 5.0%
Ash.....max. 2.0%
pH6.5 – 7.5
Heavy metals max. 20 ppm
Albumin (electrophoresis).....min. 98%
Solubility..... Soluble at 7% in water
Protein.....min. 97%
Endotoxin max. 1.0 EU/mg

BOVIN SERUM ALBUMIN SEROLOGICAL SOLUTION

SEROLOGICAL SOLUTION COHN V EQBL63

DESCRIPTION

This 30% serological solution is a sterile, amber colored solution of concentrated bovine serum albumin. Made from Cohn V BSA.

APPLICATIONS

This solution is a convenient nutrient concentrate used to formulate media for bacteria such as *Leptospira*, *Rickettsiaceae*, *Mycobacteria*, *Treponema*, and *parasitic protozoan*. This solution is also used as a nutrient in growth media for the manufacture of veterinary vaccines and in the *Treponema pallidum* immobilization test. The 30% solutions can serve as a stock solution for using BSA in immunodiagnostic assays.

STORAGE AND STABILITY

This sterile solution is stable for 3 years when stored at +5°C +/- 3°C.

PACK SIZE

500 ml bottle

SPECIFICATIONS

Protein content (albumin) 29-32%
Albumin (electrophoresis).....min. 96%
pH7.0+ 0.2

The standard solution for serological applications. Isotonic to Human erythrocytes. Supplied with or without 0.1% sodium azide.

BOVIN SERUM ALBUMIN SEROLOGICAL SOLUTION

STANDARD SEROLOGICAL SOLUTION HS EQBL64

DESCRIPTION

This 30% solution is a sterile, amber colored solution of concentrated bovine serum albumin. This bovine serum albumin is made by a proprietary heat shock process and is produced from USA-sourced bovine plasma from BSE-free cattle.

USES

Nutrient and tissue culture media or as a protein standard.

STORAGE AND STABILITY:

This sterile solution is stable for 3 years when stored at +5°C +/- 3°C.

PACK SIZE

500 ml bottle

SPECIFICATIONS

pH7.0 ± 0.2
Protein content (albumin) 29-32%
Albumin (electrophoresis).....min. 98%

Supplied with or without 0.1% sodium azide.

■ CONTACT US

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