



Bovine Albumins

Bovine Serum Albumins (BSA) grades

BSA Standard grade powder Suits most biotechnologies, notably saturation for immunodetections	UPQ84170, 100g UPQ84171, 500g UPQ84172, 1Kg	BSA Standard grade 30% solution BSA Standard grade IH grade 30% solution	UP900100, 50ml UP90010, 500ml UP900102, 1L UP900130, 50ml UP90013131, 500ml UP900132, 1L
BSA Biotech Grade powder (Protease free)	UP101594, 100g UP101595, 500g UP101596, 1Kg	BSA Biotech Grade 30% solution	10160 inquire
BSA IgG free powder	WU1642, 100g WU1643, 500g WU1644, 1Kg	BSA MolBio grade (DNAse free) powder 30% solution	283911, 100g 283912, 500g 610530, 50ml 610531, 500ml
BSA Fatty acid free powder	792671, 100g 792672, 500g 792673, 1Kg	BSA Fatty acid free 30% solution	BX344 inquire
BSA Low endotoxin powder BSA Very Low endotoxin	C71141, 100g C71142, 500g C71143, 1Kg C7114A, 100g	BSA Low endotoxin 30% solution	C71151, 50ml
BSA Low Hormone	KV5520, 100g		
BSA pH5.2 powder BSA Low salt	328902 , 1Kg 32890A, 100g 32890A, 500g	BSA pH5.2 30% solution	BX5640 inquire
BSA Polymerized, IH grade 30% solution	BJ1450, 50ml BJ1451, 125ml	BSA Polymerized, IH grade 30% solution	BJ1440, 50ml BJ1441, 125ml

Storage: +4°C (L)





FT-O84171

Technical Information

Bovine Serum Albumin (BSA) is a protein widely used in research and industry, in a variety of applications requiring sometime very precise characteristics, as absence of certain substances, material source origin. The BSA characteristics are driven largely by the preparation method, i.e. Heat Shock Isolation versus Cold Ethanol Fractionation. To suits the different applications needs, Uptima prepares several grades of BSA, with suitable methods and quality control for specific characteristics (see related products).

Applications

Uptima BSA are high quality products dedicated to many applications including: Immunodetection
Biochemistry
Molecular Biology
Manufacturing

Standard grade BSA #UPQ841 is recommended as a first intention and cost-effective choice for most Biotechnology applications.

It is largely used in **Immunodetection techniquess** as an economic blocking agent (for microplates, blotting membranes, IHC/IHF sections) and saturating agent in (antibodies) probes dilution and washing buffers.

It is also used as a component in manufacturing, in cosmetics and diagnostics.

It suits many others techniques, however more qualified grades may be preferred for demanding applications as follows.

<u>Biotech grade</u> (#UP10159, #10160 for 30% solution) is recommended more specifically for enzyme/protein stabilization applications at it is Protease free. Also suits most Molecular Biology - Genomic applications and Immunology (ELISA).

MolBio grade (#28391, and #61053 for 30% solution) is recommended especially for genomics applications (i.e. in media for FISH probes).

<u>Endotoxin free grade</u> and <u>Hormone free grade</u> (#KV552) are recommended for application with cells, respectively more specifically as an additive in cell culture media and for most demanding cell assays.

IgG free grade (#WU164)is recommended pour ImmunoAssays, in which absence of Immunoglobulin compounds may be critical.

Fatty Acid free grade (#79267), *pH5.2 grade* (#32890/BX564) and *Low Salt grade* (#3289) are designed for specific applications. Please as Uptima.

See below paragraph 'characteristics' for helping to select the most suitable grade for your application. In any case, our BSA are only sold as R&D in vitro reagents and should be fully validated for any other use.





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Quality Specifications

• The **Standard grade BSA** #**UPQ8417** is primarily controlled for protein content, purity (>95%, and typically \sim 98%), pH (10% solution is 6,5 – 7,4) and absence of mesophilic germs. A certificate of analysis is available on inquire. DNase, RNase, Protease, Endotoxin or fatty acids levels are low, although not controlled for each batch.

CHARACTERISTICS

STANDARD Grade :	LYOPHILIZED	30% SOLUTION
	Powder #UPQ8417	Solution #UP90010
Aspect	Flakes	Limpid liquid
Colour	Pale yellow	Amber
Dry extract	-	> 300 g/l
Proteins	> 92%	> 290 g/l
Moisture	< 5.0%	-
Purity	> 95 %	> 97 %
pH (10 % solution)*	6.5 - 7,4	6.5 - 7.4
Mesophilic germs	< 100 CFU/g	Absence/1 ml
Preservative*	None	None

• Following BSA grades share the base characteristic of our standard grade (above) and additional specifications:

BIOTECH Grade	Protease free Low RNA/DNAses
powder #UP10159 30% Solution #UP90101	More information: see <u>FT-104594</u> and <u>FT-900101</u>
MOL.BIO Grade powder #UP28390	DNase= not detected RNase = No activity detect during 4hours
LOW ENDOTOXIN Powder #C7114 30% Solution #C71145	Endotoxin < 15 EU/mg of proteins
VERY LOW ENDOTOXIN Powder #C7114A	Endotoxin < 2 EU/mg of proteins
LOW HORMONE Powder #KV552 30% Solution #KV552A	FT4 < 0.04 pg/mg; FT3 < 0.006 pg/mg; Insulin < 0.002 μ U/mg
FATTY ACIDS FREE powder #79267 30% solution #BX344	Fatty acids: <0.1%
IgG FREE powder #WU164	IgG: not detectable
pH 5,2 Powder #32890 30% Solution #BX564	pH between 4.8 and 5.6 Low salt
LOW SALTS Powder #32890A	Lowest salt; Calcium <0.006%
IMMUNO-HAEMATOLOGY 30% solution #UP90013	Octanoic acid: 10-15 g/L for solution 30 % See FT-900131
POLYMERIZED 30% solution #BJ144 30% solution IH #BJ145	Monomers rate < 75 %

Origin - Sanitary

LIFE SCIENCES

These BSA are made from bovine raw materials of **French origin**. The product is **safe**: it does not contain and does not stem from specified risky material defined by the European Commission's decision 97/534/CE. Plasma was collected from





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bovines in slaughterhouse inspected by veterinary services before and after death. A veterinary and sanitary certificate is available on inquire.

Stability - Solubility

Our BSA are stable at least 3 years when stored properly (+4°C).

Bovine serum Albumin is readily soluble in distilled water or saline buffer. Reconstitution will proceed somewhat faster in buffered saline (pH 7.0 - 8.0) above the isoelectric point for albumin (4.7).

Helpful hints: start good agitation of the diluent, and then add the powder in small increments. The diluent and powder should be at room temperature. Avoid vigorous stirring or agitation, as foaming will result and may affect BSA stability. For more conveniency, choose our BSA 30% solutions (cat# UP900100 for example)

Please ask Uptima- Interchim for any question.

Other albumins:

BSA RIA Grade #BV2840 BSA, nitrated protein #HS1940 BSA maxibind #UP84225A Other saturating agents for immunoassays, including.:

- <u>SeaBlock</u> to reduce background due to mammalian cross-reactivities
- BSA containing buffers (PBS, TBS)
- Fat-free powdered milk #768701

Disclaimer : Materials from Uptima are sold **for research use only**, and are not intended for food, drug, household, or cosmetic use. Uptima is not liable for any damage resulting from handling or contact with this product.

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