



Bovine Albumins

Bovine Serum Albumins (BSA) grades

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|---|---|--|---|
| BSA Standard grade powder <i>Suits most biotechnologies, notably saturation for immunodetections</i> | UPQ84170, 100g UPQ84171, 500g UPQ84172, 1Kg | BSA Standard grade 30% solution | UP900100, 50ml UP90010, 500ml UP900102, 1L |
| BSA Biotech Grade powder (Protease free) | UP101594, 100g UP101595, 500g UP101596, 1Kg | BSA Standard grade IH grade 30% solution | UP900130, 50ml UP90013131, 500ml UP900132, 1L |
| BSA IgG free powder | WU1642, 100g WU1643, 500g WU1644, 1Kg | BSA Biotech Grade 30% solution | 10160 inquire |
| BSA Fatty acid free powder | 792671, 100g 792672, 500g 792673, 1Kg | BSA MolBio grade (DNAse free) powder 30% solution | 283911, 100g 283912, 500g 610530, 50ml 610531, 500ml |
| BSA Low endotoxin powder BSA Very Low endotoxin | C71141, 100g C71142, 500g C71143, 1Kg C7114A, 100g | BSA Fatty acid free 30% solution | BX344 inquire |
| BSA Low Hormone powder | KV5520, 100g | BSA Low endotoxin 30% solution | C71151, 50ml |
| BSA pH5.2 powder BSA Low salt | 328902, 1Kg 32890A, 100g 32890A, 500g | BSA Low Hormone 30% solution | KV552A, 50ml |
| BSA Polymerized, IH grade 30% solution | BJ1450, 50ml BJ1451, 125ml | BSA pH5.2 30% solution | BX5640 inquire |
| | | BSA Polymerized, IH grade 30% solution | BJ1440, 50ml BJ1441, 125ml |

Storage: +4°C (L)

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

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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 techniques** 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.

Biotech grade (#UP10159, #10160 for 30% solution) is recommended more specifically for enzyme/protein stabilization applications at it is Protease free. Also suits most molecular biology and genomic applications because it is DNase, RNase free. .

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

Endotoxin free grade and **Hormone free grade** (#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.

Quality Specifications

The Standard grade BSA #UPQ8417 is primarily controlled for protein content, purity (>95%, and typically ~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 Powder #UPQ8417 | 30% SOLUTION 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 |

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

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|---|--|
| BIOTECH Grade powder #UP10159 30% Solution #UP90101 | Protease free Low RNA/DNAses See more information ^[FT-101594] and more information ^[FT-900101] |
| 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 µU/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 more information ^[FT-900101] |
| POLYMERIZED 30% solution #BJ144 30% solution IH #BJ145 | Monomers rate < 75 % |

Origin - Sanitary

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 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 :

- [SeaBlock](#) 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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