

Bovine Serum Albumin Fatty Acids Free Lyophilised

Colour : white/off-white to yellow lyophilised powder (flakes). There are some colour variations from batch to batch.

Purity : > 98%

Fatty Acids : < 10mg/100g

Mesophilic germs : < 100CFU/g

pH : 6.5 – 7.4

Storage conditions : Store dry powder at +2°C to +8°C, protected from light

Shelf life : 36 months

Description :

BSA makes up approximately 60% of all proteins in animal serum. It is commonly used in cell culture protocols, particularly where protein supplementation is necessary and the other components of serum are unwanted. In cell culture its main role is as a carrier of small molecules. Because of its negative charge, BSA binds water, salts, fatty acids, vitamins and hormones, then carries these bound components between tissues and cells. The binding capacity also makes BSA an effective scavenger to remove toxic substances, including pyrogens, from the medium.

Albumins are readily soluble in water and can only be precipitated by high concentrations of neutral salts such as ammonium sulphate. The solution stability of BSA is very good (especially if the solutions are stored as frozen aliquots). In fact, albumins are frequently used as stabilizers for other solubilised proteins (e.g., labile enzymes). However, albumin is readily coagulated by heat. When heated to 50°C or above, albumin quite rapidly forms hydrophobic aggregates which do not revert to monomers upon cooling. At somewhat lower temperatures aggregation is also expected to occur, but at relatively slower rates.

Human and bovine albumins contain 16% nitrogen and are often used as standards in protein calibration studies.

Albumin is used to solubilise lipids, and is also used as a blocking agent in Western blots or ELISA applications.

Traceability :

All bovine proteins are obtained from Bovine Spongiform Encephalopathy (BSE) free countries or animals declared BSE free by the European authorities.