Specification

Albumin Fraction V (pH 7.0) A1391

Physical Description:	Solid
Product Code:	A1391
Product Name:	Albumin Fraction V (pH 7.0)
Specifications:	Assay (Protein): min. 98 % pH (2 %; H_2O; 20°C): 6.6 - 7.5 Heavy metals: max. 0.001 % Sulfated ash: max. 3 % Loss on drying (105°C; 4 h): max. 3 % Fat: max. 1.0 %
WGK:	1
Storage:	2-8°C
Origin:	from bovine serum
M:	approx. 68000 g/mol
CAS:	9048-46-8
EINECS:	232-936-2
CS:	35029070

Comment

Bovine serum albumin (BSA) is added as a stabilizing component for proteins / enzymes to several enzyme reaction and storage buffers. The concentration usually ranges from 0.01 % (0.1 mg/ml; e. g. ref. 2) to 3 % (30 mg/ml; e. g. ref. 1, 2). BSA is added to the 10X concentrated buffers of DNA-modifying enzymes or restriction enzymes in a concentration of 0.5 mg/ml (see e. g. ref. 6, 8). Alternatively, BSA can be substituted by gelatin for such purposes at the same concentration. Besides, albumin is applied as a blocking agent for blocking unbound surfaces of blotting membranes in immunoblots (3 %; ref. 1, 2, 7) or ELISAs (3 % in PBS, ref. 2) or for the dilution of antisera and antibody-stock solutions, respectively. In ELISAs, BSA is frequently replaced by non-fat dried milk (A0830). As standard for protein determinations see ref. 9.This fraction of albumin has been manufactured by a combination of the heat-shock method and alcohol precipitation. Albumin is stable as powder (3 years) or in solution (biological buffers like PBS; one year at \+4°C to -20°C). Stock solutions are prepared in concentrations up to 20 %. If crystals are formed during storage of the solutions, they can be redissolved by warming up to 37°C and mixing. Usually, sodium azide is added at a final concentration of 2 mM (or 0.02 - 0.2 %) to prevent microbial contaminations.

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