Fermentas
LIFE SCIENCES

CERTIFICATE OF ANALYSIS

Bovine Serum Albumin (BSA),

molecular biology grade

#B14 5 mg

Lot:

Concentration: 20 mg/ml

Store at -20°C

Description

Bovine Serum Albumin (BSA) is suitable for stabilization of enzymes during storage and for enzymatic reactions where the absence of nucleases is essential. It also prevents adhesion of enzymes to the reaction tubes and tip surfaces.

Storage Buffer

10 mM Tris-HCl (pH 7.4 at 25°C), 100 mM KCl, 1 mM EDTA and 50% (v/v) glycerol.

Applications

- Enzyme stabilization.
- PCR with low purity templates.
- DNA digestion with restriction endonucleases.

Molecular Weight

Approximately 66 kDa.

QUALITY CONTROL ASSAY DATA

Endodeoxyribonuclease Assay

No detectable conversion of covalently closed circular DNA to nicked or linear DNA was observed after incubation of 50 µg BSA with 1 µg of supercoiled pUC19 DNA in buffer (10 mM Bis-Tris propane-HCl (pH 6.5 at 37°C), 10 mM $MgCl_2$) for 16 hours at 37°C.

Exodeoxyribonuclease Assay

Less than 5% of the total radioactivity was released into TCA-soluble fraction after incubation of 50 µg BSA and less than 0.5% of the total radioactivity was released into TCA-soluble fraction after incubation of 5 µg BSA with 1 µg of sonicated *E.coli* [^{3}H]-DNA in 50 µl of buffer (33 mM Tris-acetate (pH 7.9 at 37°C), 10 mM Mg-acetate, 66 mM K-acetate) for 4 hours at 37°C.

Ribonuclease Assay

Less than 5% of the total radioactivity was released into TCA-soluble fraction after incubation of 50 µg BSA and less than 0.5% of the total radioactivity was released into TCA-soluble fraction after incubation of 5 µg BSA with 1 µg of [^{3}H]-RNA in 50 µl of buffer (33 mM Tris-acetate (pH 7.9 at 37°C), 10 mM Mg-acetate, 66 mM K-acetate) for 4 hours at 37°C.

Protease Assay

No degradation of protease substrate was determined after incubation of 2 mg BSA with FTC-casein for 16 hours at 37°C.

Labeled Oligonucleotide (LO) Assay

No detectable degradation of single-stranded or double-stranded labeled oligonucleotide occurred during incubation with 2 mg/ml BSA in reaction mixture for 4 hours at 37°C.

Functional Assay

Functionally tested in PCR with *Pfu* DNA polymerase.

Quality authorized by:  Jurgita Zilinskiene

PRODUCT USE LIMITATION.

This product is developed, designed and sold exclusively *for research purposes and in vitro use only.* The product was not tested for use in diagnostics or for drug development, nor is it suitable for administration to humans or animals.

Please refer to www.fermentas.com for Material Safety Data Sheet of the product.