# BSA (C-16): sc-50710



The Power to Question

#### **BACKGROUND**

Bovine serum albumin (BSA) is an abundant plasma protein in bovines that is important for maintaining osmotic pressure in blood plasma for proper distribution of body fluids between intravascular compartments and body tissues. BSA is a common buffer component for immunoglobulin type assays due to good solubility characteristics for water, Ca<sup>2+</sup>, Na+, K+, fatty acids, hormones and bilirubin. BSA makes up about half of the protein in plasma and represents the most stable and soluble protein in the plasma. It is a suitable reagent for laboratories developing immunoassays, mostly due to its availability, solubility and the numerous functional groups present for coupling. The BSA component contains several lysines that are capable of reacting with conjugation sites of linkers, making it applicable as a carrier protein for antigenic compounds.

### **REFERENCES**

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- Terman, D.S., et al. 1976. Specific removal of bovine serum albumin (BSA) antibodies in vivo by extracorporeal circulation over BSA immobilized on nylon microcapsules. J. Immunol. 116: 1337-1341.
- 3. Angelisova, P., et al. 1986. The characteristics of monoclonal antibodies against human albumin. Folia Biol. 32: 289-294.
- Scott, T. and Eagleson, M. 1988. Concise Encyclopedia Biochemistry. New York: Walter de Gruyter.
- Fuchtenbusch, M., et al. 1997. Antibodies to bovine serum albumin (BSA) in type 1 diabetes and other autoimmune disorders. Exp. Clin. Endocrinol. Diabetes 105: 86-91.
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- Kooser, A., et al. 2003. Investigation of the antigen antibody reaction between anti-bovine serum albumin (a-BSA) and bovine serum albumin (BSA) using piezoresistive microcantilever based sensors. Biosens. Bioelectron. 19: 503-508.

## **SOURCE**

BSA (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of BSA of bovine origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-50710 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

BSA (C-16) is recommended for detection of BSA of bovine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1–2  $\mu$ g per 100–500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

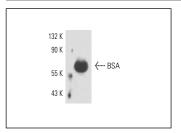
Molecular Weight of BSA: 67 kDa.

Positive Controls: Bovine serum albumin under reducing conditions, Bovine Serum Albumin (BSA): sc-2323 or Bovine PBL whole cell lysate.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

#### DATA



BSA (C-16): sc-50710. Western blot analysis of purified bovine serum albumin under reducing conditions.

#### **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.



Try **BSA (A23-A/D3):** sc-65701 or **BSA (5H1):** sc-70446, our highly recommended monoclonal aternatives to BSA (C-16).