

# Product information

**S100A5, 1-92 aa**

**Human, His-tagged, Recombinant, *E.coli***

**Cat. No. IBATGP0957**

**Full name:** S100 calcium binding protein A5

**NCBI Accession No.:** NP\_002953

**Synonyms:** S100D

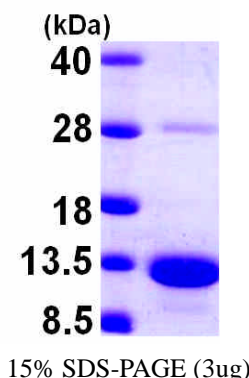
**Description:** S100 calcium binding protein A5, also known as S100A5, is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. S100 proteins are localized in the cytoplasm and nucleus of a wide range of cells, and involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. S100A5 has a Ca<sup>2+</sup> affinity 20- to 100-fold higher than the other S100 proteins studied under identical conditions. This protein also binds Zn<sup>2+</sup> and Cu<sup>2+</sup>, and Cu<sup>2+</sup> strongly which impairs the binding of Ca<sup>2+</sup>. S100A5 is expressed in very restricted regions of the adult brain. Recombinant human S100A5 protein, fused to His-tag at N-terminus, was expressed in *E.coli* and purified by using conventional chromatography techniques.

**Form:** Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 30% glycerol, 0.1M NaCl, 0.1mM PMSF

**Molecular Weight:** 12.9 kDa (112aa) confirmed by MALDI-TOF

**Purity:** > 90% by SDS - PAGE

**Concentration:** 1 mg/ml (determined by Bradford assay)



**Sequences of amino acids:**

MGSSHHHHH SSGLVPRGSH METPLEKALT TMVTFHKYS GREGSKLTLS RKELKELIKK ELCLGEMKES SIDDLMKSLD KNSDQEIFDK  
EYSVFLTMLC MAYNDFLED NK

**General references:**

Schafer BW., *et al.* (1996) *Trends Biochem Sci.* 21(4):134-40.

Schafer BW., *et al.* (2000) *J Biol Chem.* 275(39):30623-30.

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

**For research use only. This product is not intended or approved for human, diagnostics or veterinary use.**