

Recombinant Human S100 Calcium Binding Protein A5

Cat. No. S100A5-430H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human S100 Calcium Binding Protein A5 cloned from human cDNA was expressed in <i>E.coli</i> . The protein consists of the human S100A5 (residues 1-92, swissprot accession P33763). MW = 21.5 kDa (dimer).
Species	Human
Source	E.coli
Protein Length	1-92 a.a.
Description	Protein S100-A5 is a protein that in humans is encoded by the S100A5 gene. The protein encoded by this gene is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. S100 proteins are localized in the cytoplasm and/or 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. S100 genes include at least 13 members which are located as a cluster on chromosome 1q21. This protein has a Ca ²⁺ affinity 20- to 100-fold higher than the other S100 proteins studied under identical conditions. This protein also binds Zn ²⁺ and Cu ²⁺ , and Cu ²⁺ strongly which impairs the binding of Ca ²⁺ . This protein is expressed in very restricted regions of the adult brain.
Purity	> 90% by SDS-PAGE. The protein runs as a monomer giving a single band migrating at a molecular weight < 14 kDa.
Supplied As	1mg/ml in MES 20mM, NaCl 100 mM, pH 6.5. The concentration is calculated from

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the absorbance at 280nm ($\epsilon_{280} = 4595 \text{ M}^{-1} \text{ cm}^{-1}$).

Characteristics

Under the above described conditions, to avoid precipitation, the product can be concentrated to a maximum of 1.5mM (dimer).

Storage

-20° C. The protein is stable 25 °C for several hours. After initial defrost, aliquot product into individual tubes and refreeze at -20° C. Avoid repeated freeze/thaw cycles.

GENE INFORMATION

Gene Name

S100A5 S100 calcium binding protein A5 [Homo sapiens]

Synonyms

S100A5; S100 calcium binding protein A5; S100D; S100A5; Protein S-100D; S100 calcium-binding protein A5; Protein S-100D

Gene ID

6276

mRNA Refseq

NM_002962

Protein Refseq

NP_002953

MIM

176991

UniProt ID

P33763

**Chromosome
Location**

1q21

Function

calcium ion binding

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