Active Recombinant Human S100A1 protein, His-tagged

Cat. No. S100A1-6211H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Human S100A1 protein(P23297)(1~94 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Human
Source	E.coli
ProteinLength	1-94 aa
Form	Lyophilized from sterile PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Bio-activity	Small calcium binding protein that S100 Calcium Binding Protein (S100), also known as S100 Alpha (S100A1), is a member of the S100 family of calcium-binding proteins. As with most S100 proteins, S100A1 proteins are localized in the cytoplasm and/or nucleus of a wide range of cells, and it possess a variety of intracellular and extracellular functions. They interact with multiple receptors and signal transducers to regulate pathways that govern inflammation, cell differentiation, proliferation, energy metabolism, apoptosis, calcium homeostasis, cell cytoskeleton and microbial resistance. S100 Calcium Binding Protein A4 (S100A4) is one of targets of S100A1. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human S100A1 and recombinant mouse S100A4. Briefly, S100A1 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to S100A4-coated microtiter wells and incubated for 1h at 37°C.

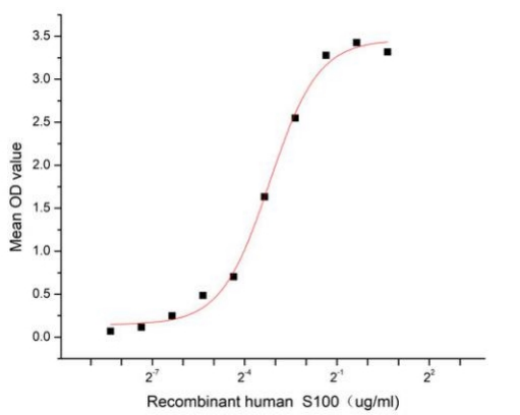
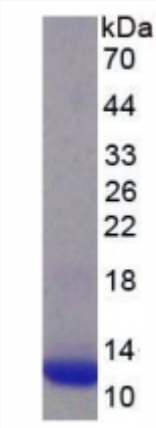
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	Wells were washed with PBST and incubated for 1h with anti-S100A1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37°C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 µ stop solution to the wells and read at 450/630 nm immediately. The binding activity of recombinant human S100A1 and recombinant mouse S100A4 was shown, the EC50 for this effect is 0.11 ug/mL.
Molecular Mass	11.4kDa
Endotoxin	<1.0EU per 1μg (determined by the LAL method).
Purity	> 97% as determined by SDS-PAGE.
Storage	Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	S100A1 S100 calcium binding protein A1 [Homo sapiens]
Official Symbol	S100A1
Synonyms	S100A1; S100 calcium binding protein A1; S100 calcium binding protein A1, S100A; protein S100-A1; S100 alpha; S-100 protein alpha chain; S-100 protein subunit alpha; S100 calcium-binding protein A1; S100 protein, alpha polypeptide; S100; S100A; S100-alpha;

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Gene ID	6271
mRNA Refseq	NM_006271
Protein Refseq	NP_006262
MIM	176940
UniProt ID	P23297
Activity	
SDS-PAGE	

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA