

S100 Calcium Binding Protein A8 (S100A8) Active Protein | S100A8 active protein

Active S100 Calcium Binding Protein A8 (S100A8)

CATALOG #
AAA149251

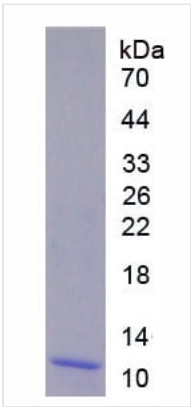
APPLICATIONS
Activity Assay, Cell Culture

PRODUCT SYNONYMS

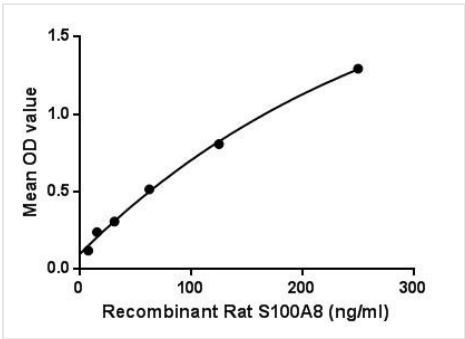
S100 Calcium Binding Protein A8 (S100A8); Active S100 Calcium Binding Protein A8 (S100A8); MRP8; MIF; 60B8AG; CAGA; CFAG; CGLA; CP-10; L1Ag; NIF; P8; Calgranulin A; Cystic fibrosis antigen; Leukocyte L1 complex light chain; Migration inhibitory factor-related protein 8; S100A8 active protein

PRODUCT SPECIFICATIONS

Purity/Purification	> 95%
Form/Format	Freeze-Dried Powder; 20mM Tris, 150mM NaCl, pH8.0, Containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Sequence Positions	Met1~Glu89
Sequence Length	89
Applicable Applications for S100A8 active protein	Activity Assay, Cell Culture
Species	Rat
Tag	N-terminal His-Tag
Isoelectric Point	5.7
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. Avoid repeated freeze/thaw cycles. The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.



SDS-PAGE



Activity

Figure. The binding activity of S100A8 with S100A9. S100 calcium-binding protein A8 (S100A8) also known as calgranulin A, 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. Besides, S100 Calcium Binding Protein A9 (S100A9) has been identified as an interactor of S100A8, thus a binding ELISA assay was conducted to detect the interaction of recombinant rat S100A8 and recombinant rat S100A9. Briefly, S100A8 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100μL were then transferred to S100A9-coated microtiter wells and incubated for 2h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-S100A8 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50uL stop solution to the wells and read at 450nm immediately. The binding activity of S100A8 and S100A9 was shown in Figure 1, and this effect was in a dose dependent manner.

ADDITIONAL INFORMATION

Product Categories/Family for S100A8 active protein	Tumor immunity; Infection immunity
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NCBI AND UNIPROT INFORMATION

NCBI GI #	281485600
NCBI GeneID	116547
NCBI Accession #	NP_446274.2
NCBI GenBank Nucleotide #	NM_053822.2
UniProt Accession #	P50115
Molecular Weight	Predicted MW: 13.9kDa Accurate MW: 11kDa
NCBI Official Full Name	protein S100-A8
NCBI Official Synonym Full Names	S100 calcium binding protein A8
NCBI Official Symbol	S100a8
NCBI Official Synonym Symbols	Mrp8
NCBI Protein Information	protein S100-A8
UniProt Protein Name	Protein S100-A8
UniProt Gene Name	S100a8
UniProt Synonym Gene Names	Mrp8; MRP-8; p8

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/active-protein/s100-calcium-binding-protein-a8-s100a8/149251>