

S100 Calcium Binding Protein A7 (S100A7) Active Protein | S100A7 active protein

Active S100 Calcium Binding Protein A7 (S100A7)

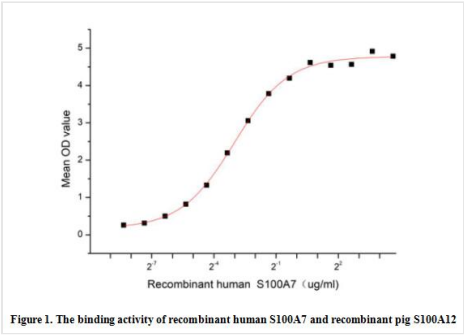
CATALOG # AAA161876	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
-------------------------------	-----------------------	---

PRODUCT SYNONYMS

S100 Calcium Binding Protein A7 (S100A7); Active S100 Calcium Binding Protein A7 (S100A7); S100 Calcium Binding Protein A7; S100-A7; PSOR1; S100A7c; Psoriasin 14; S100A7 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 90% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Met1~Gln10 1
Applicable Applications for S100A7 active protein	Activity Assay, Cell Culture
Species	Human
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	6.7
Research Area	Tumor immunity, Infection immunity
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

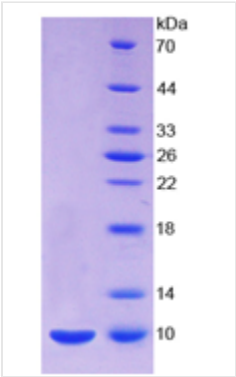


Bioactivity

S100 Calcium Binding Protein A7 (S100A7), a member of the S100 family of vertebrate proteins, is an EF-hand type calcium binding protein localized in epithelial cells. S100A7 regulates cell proliferation and differentiation. An S100A7 overexpression may occur in response to inflammatory stimuli, such in psoriasis, besides S100A7 expression is upregulated in several cancers including skin, breast, lung, head, neck, cervix, bladder and gastric cancer. S100 Calcium Binding Protein A12 (S100A12) has been identified as an interactor of S100A7, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human S100A7 and recombinant pig S100A12. Briefly, S100A7 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to S100A12-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-S100A7 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37 degree C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 uL stop solution to the wells and read at 450/630 nm immediately. The binding activity of recombinant human S100A7 and recombinant pig S100A12 was shown in Figure 1, the EC50 for this effect is 0.12 ug/mL.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for S100A7 active protein	Active proteins
---	-----------------

NCBI AND UNIPROT INFORMATION

NCBI GI #	49457324
UniProt Accession #	P31151; Q5SY67; Q6FGE3; Q9H1E2
Molecular Weight	11,471 Da
NCBI Official Full Name	S100A7
UniProt Protein Name	Protein S100-A7
UniProt Gene Name	S100A7
UniProt Synonym Gene Names	PSOR1; S100A7C
UniProt Entry Name	S10A7_HUMAN

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.