

S100A8 active protein

S100A8 Protein, Human, Recombinant (His Tag)

CATALOG #
AAA257965

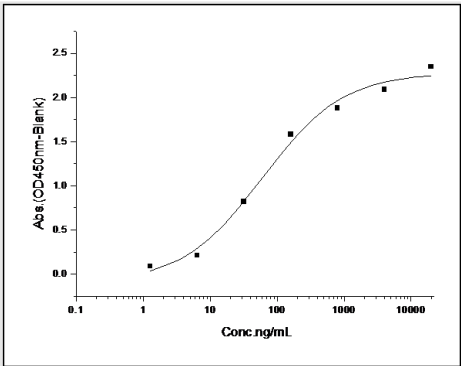
HOST
Baculovirus-Insect Cells

PRODUCT SYNONYMS

S100A8; S100A8 Protein; Human; Recombinant (His Tag); Human S100A8/CAGA/p8 Protein (His Tag); 60B8AG Protein; CAGA Protein; CFAG Protein; CGLA Protein; CP-10 Protein; L1Ag Protein; MA387 Protein; MIF Protein; MRP-8 Protein; MRP8 Protein; NIF Protein; P8 Protein; S100 calcium binding protein A8; S100A8 active protein

PRODUCT SPECIFICATIONS

Host	Baculovirus-Insect Cells
Purity/Purification	>90% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile 20mM Tris, 500mM NaCl, 10% glycerol, pH8.0. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Met1-Glu93
Species	Human
Activity	Measured by its ability to bind recombinant human S100A9 in a functional ELISA.
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Met
Tag	C-His
Protein Construction	A DNA sequence encoding the human S100A8 (NP_002955.2)(Met 1-Glu 93) was expressed, fused with a polyhistidine tag at the C-terminus.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.



SDS-PAGE

Application Data
Measured by its ability to bind recombinant human S100A9 in a functional ELISA.

ADDITIONAL INFORMATION

Related Product Information for S100A8 active protein	Background: S100A8 is a member of the S100 protein family containing 2EF-hand calcium-binding motifs. S100 proteins are involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. Altered expression of S100A8 protein is associated with various diseases and cancers. S100A8 may have an immunoregulatory role by contributing to the regulation of fetal-maternal interactions. It may play a protective role and its absence may allow infiltration by maternal cells, a process eventually manifesting as resorption. The heterodimeric S100 protein complex S100A8/A9 which has been shown to be involved in inflammatory and neoplastic disorders. The complex can induce cell proliferation, or apoptosis, inflammation, collagen synthesis, and cell migration. S100A8/A9 has emerged as important pro-inflammatory mediator in acute and chronic inflammation. More recently, increased S100A8 and S100A9 levels were also detected in various human cancers, presenting abundant expression in neoplastic tumor cells as well as infiltrating immune cells. On the one hand, S100A8/A9 is a powerful apoptotic agent produced by immune cells, making it a very fascinating tool in the battle against cancer. It spears the risk to induce auto-immune response and may serve as a lead compound for cancer-selective therapeutics. In contrast, S100A8/A9 expression in cancer cells has also been associated with tumor development, cancer invasion or metastasis. Altogether, its expression and potential cytokine-like function in inflammation and cancer suggest that S100A8/A9 may play a key role in inflammation-associated cancer.
Product Categories/Family for S100A8 active protein	Calcium-binding Proteins and Related Molecules
References	Passey RJ, et al. (1999) S100A8: emerging functions and regulation. J Leukoc Biol. 66(4): 549-56.Gebhardt C, et al. (2006) S100A8 and S100A9 in inflammation and cancer. Biochem Pharmacol. 72(11): 1622-31.Halayko AJ, et al. (2009) S100A8/A9: a mediator of severe asthma pathogenesis and morbidity Can J Physiol Pharmacol. 87(10): 743-55.Ghavami S, et al. (2009) S100A8/A9: a Janus-faced molecule in cancer therapy and tumorigenesis. Eur J Pharmacol. 625(1-3): 73-83.Ha YS, et al. (2010) mRNA Expression of S100A8 as a Prognostic Marker for Progression of Non-Muscle-Invasive Bladder Cancer. Korean J Urol. 51(1): 15-20.

NCBI AND UNIPROT INFORMATION

NCBI GI #	21614544
NCBI GeneID	6279
NCBI Accession #	NP_002955.2
NCBI GenBank Nucleotide #	NM_002964.4
UniProt Accession #	P05109; Q5SY70; Q9UC84; Q9UC92; Q9UCJ0; Q9UCM6; A8K5L3; D3DV37
Molecular Weight	10,835 Da
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	P8; MIF; NIF; CAGA; CFAG; CGLA; L1Ag; MRP8; CP-10; MA387; 60B8AG
NCBI Protein Information	protein S100-A8; MRP-8; S100 calcium-binding protein A8 (calgranulin A); calgranulin-A; calprotectin L1L subunit; cystic fibrosis antigen; leukocyte L1 complex light chain; migration inhibitory factor-related protein 8; urinary stone protein band A
UniProt Protein Name	Protein S100-A8
UniProt Gene Name	S100A8
UniProt Synonym Gene Names	CAGA; CFAG; MRP8; CFAG; MRP-8; p8
UniProt Entry Name	S10A8_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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/baculovirus-insect-cells-active-protein/s100a8/257965>