

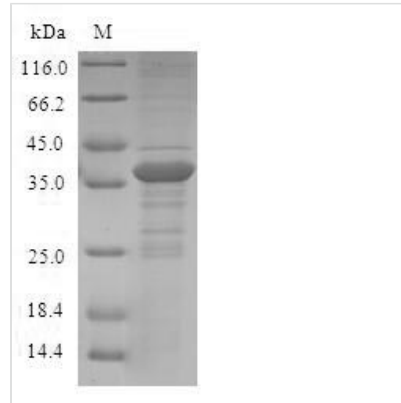


Recombinant Human Protein S100-A12 (S100A12)

Product Code	CSB-EP020626HU
Relevance	S100A12 is a calcium-, zinc- and copper-binding protein which plays a prominent role in the regulation of inflammatory processes and immune response. Its proinflammatory activity involves recruitment of leukocytes, promotion of cytokine and chemokine production, and regulation of leukocyte adhesion and migration. Acts as an alarmin or a danger associated molecular pattern (DAMP) molecule and stimulates innate immune cells via binding to receptor for advanced glycation endproducts (AGER). Binding to AGER activates the MAP-kinase and NF-kappa-B signaling pathways leading to production of proinflammatory cytokines and up-regulation of cell adhesion molecules ICAM1 and VCAM1. Acts as a monocyte and mast cell chemoattractant. Can stimulate mast cell degranulation and activation which generates chemokines, histamine and cytokines inducing further leukocyte recruitment to the sites of inflammation. Can inhibit the activity of matrix metalloproteinases; MMP2, MMP3 and MMP9 by chelating Zn ²⁺ from their active sites. Possesses filariacidal and filariastatic activity. Calcitermin possesses antifungal activity against C.albicans and is also active against E.coli and P.aeruginosa but not L.monocytogenes and S.aureus
Abbreviation	Recombinant Human S100A12 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P80511
Alias	CGRP Calcium-binding protein in amniotic fluid 1
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	≥ 90% as determined by SDS-PAGE.
Sequence	TKLEEHLEGIVNIFHQYSVRKGFDTLSKGLKQLLTKELANTIKNIKDKAVIDEI FQGLDANQDEQVDFQEFISLVAIALKAAHYHTHKE
Research Area	Immunology
Source	E.coli
Target Names	S100A12
Protein Names	Recommended name: Protein S100-A12 Alternative name(s): CGRP Calcium-binding protein in amniotic fluid 1 Short name= CAAF1 Calgranulin-C Short name= CAGC Extracellular newly identified RAGE-binding protein Short name=
Expression Region	2-92aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.



Tag Info	N-terminal GST-tagged
Mol. Weight	37.4kDa
Protein Length	Full Length of Mature Protein

Image

(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.