

Recombinant Mouse S100a8 protein (His Tag)

Catalog No. PKSM500008

Note: Centrifuge before opening to ensure complete recovery of vial contents.

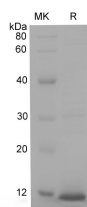
Description

Synonyms	60B8AG, CAGA, Calgranulin A, Calprotectin L1L subunit, CFAG, CGLA, CP 10, Cystic fibrosis antigen, L1Ag, MA387, MIF, MRP-8, MRP8, NIF, P8, Protein S100-A8, S100A8, Urinary stone protein band A, Pro-inflammatory S100 cytokine, S100 calcium-binding protein A8
Species	Mouse
Expression Host	E.coli
Sequence	Pro2-Glu89
Accession	P27005
Calculated Molecular Weight	11.5 kDa
Observed molecular weight	10-11 kDa
Tag	N-His
Bioactivity	Immunogen(E-AB-40356)

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 90 % as determined by reducing SDS-PAGE.

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Background

S100A8 is a calcium- and zinc-binding protein which plays a prominent role in the regulation of inflammatory processes and immune response. It can induce neutrophil chemotaxis and adhesion. Predominantly found as calprotectin (S100A8/A9) which has a wide plethora of intra- and extracellular functions. The intracellular functions include: facilitating leukocyte arachidonic acid trafficking and metabolism, modulation of the tubulin-dependent cytoskeleton during migration of phagocytes and activation of the neutrophilic NADPH-oxidase. Activates NADPH-oxidase by facilitating the enzyme complex assembly at the cell membrane, transferring arachidonic acid, an essential cofactor, to the enzyme complex and S100A8 contributes to the enzyme assembly by directly binding to NCF2/P67PHOX. The extracellular functions involve proinflammatory, antimicrobial, oxidant-scavenging and apoptosis-inducing activities. Its proinflammatory activity includes recruitment of leukocytes, promotion of cytokine and chemokine production, and regulation of leukocyte adhesion and migration.

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