

## Recombinant Mouse S100a9 protein (His Tag)

Catalog No. PKSM500001

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

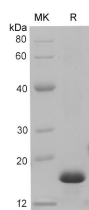
### Description

<b>Synonyms</b>	Leukocyte L1 complex heavy chain,60B8AG,CAGB,Calgranulin B,Calgranulin-B,Calprotectin L1H subunit,CFAG,CGLB,Cystic fibrosis antigen B,L1AG,Leukocyte L1 complex heavy chain,LIAG,MAC387,MIF,Migration inhibitory factor related protein 14,Migration inhibitory factor-related protein 14,MRP 14,MRP-14,MRP14,Myeloid-related protein 14,NIF,OTTHUMP00000015331,p14,Protein S100-A9,S100 A9,S100 calcium binding protein A9,S100 calcium binding protein A9 calgranulin B,S100 calcium-binding protein A9,S100A9,S10A9
<b>Species</b>	Mouse
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Ala2-Lys113
<b>Accession</b>	P31725
<b>Calculated Molecular Weight</b>	14.3 kDa
<b>Observed molecular weight</b>	15-18 kDa
<b>Tag</b>	N-His & C-His
<b>Bioactivity</b>	Immunogen(E-AB-40341)

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	Please contact us for more information.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	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.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### For Research Use Only

## Background

S100A9 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, adhesion, can increase the bactericidal activity of neutrophils by promoting phagocytosis via activation of SYK, PI3K/AKT, and ERK1/2 and can induce degranulation of neutrophils by a MAPK-dependent mechanism. 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.

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