

S100A9 Monoclonal Antibody

catalog number: **AN200040P**

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

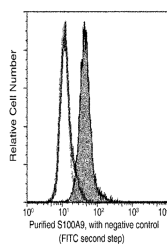
Description

Reactivity	Human
Immunogen	Recombinant Human S100A9 protein
Host	Mouse
Isotype	IgG2b
Clone	12G9
Purification	Protein A
Buffer	0.2 µm filtered solution in PBS

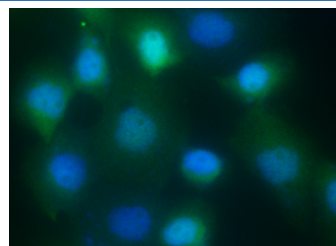
Applications

Applications	Recommended Dilution
ICC/IF	1:20-1:100
FCM	1:25-1:100

Data



Flow cytometric analysis of Human S100A9 on MCF-7 cells. The cells were stained with purified anti-Human S100A9 (Filled histogram), then stained with a FITC-conjugated second step antibody. To demonstrate specificity of staining, the binding by S100A9 Monoclonal Antibody was blocked by preincubation of the purified antibody with 20ug recombinant human S100A9 (Cat: PKSH031239) for 1 hour (Black solid line histogram).



Immunofluorescence analysis of Human S100A9 in HeLa cells. Cells were fixed with 4% PFA, permeabilized with 0.3% Triton X-100 in PBS, blocked with 10% serum, and incubated with mouse anti-Human S100A9 Monoclonal Antibody (1:60) at 37°C 1 hour. Then cells were stained with the Alexa Fluor® 488-conjugated Goat Anti-mouse IgG secondary antibody (green) and counterstained with DAPI for nuclear staining (blue). Positive staining was localized to cytoplasm and nucleus.

Preparation & Storage

Storage	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
Shipping	Ice bag

Background

For Research Use Only

S100 protein is a family of low molecular weight protein found in vertebrates characterized by two EF-hand calcium-binding motifs. There are at least 21 different S100 proteins, and the name is derived from the fact that the protein is 100% soluble in ammonium sulfate at neutral pH. Most S100 proteins are disulfide-linked homodimer, and is normally present in cells derived from the neural crest, chondrocytes, macrophages, dendritic cells, etc. S100 proteins have been implicated in a variety of intracellular and extracellular functions. They are involved in regulation of protein phosphorylation, transcription factors, the dynamics of cytoskeleton constituents, enzyme activities, cell growth and differentiation, and the inflammatory response. Protein S100-A9, also known as S100 calciumbinding protein A9, S100A9, and CAGB, is a member of the S-100 family. S100A9 is expressed by macrophages in acutely inflamed tissues and in chronic inflammation. It is also expressed in epithelial cells constitutively or induced during dermatoses. S100A9 is a calcium-binding protein. It has anti-microbial activity towards bacteria and fungi. The anti-microbial and proapoptotic activity of S100A9 is inhibited by zinc ions. S100A9 plays a role in the development of endotoxic shock in response to bacterial lipopolysaccharide (LPS). It promotes tubulin polymerization when unphosphorylated. It also promotes phagocyte migration and infiltration of granulocytes at sites of wounding. S100A9 plays a role as a proinflammatory mediator in acute and chronic inflammation and up-regulates the release of IL8 and cell-surface expression of ICAM1.