## **Elabscience**®

## **Recombinant S100A9 Monoclonal Antibody**

## catalog number: AN300081P

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

Description	
Reactivity	Human
Immunogen	Recombinant Human S100A9 Protein
Host	Rabbit
Isotype	IgG
Clone	12G10
Purification	Protein A
Buffer	0.2 µm filtered solution in PBS
Applications	Recommended Dilution
WB	1:500-1:2000
Data	
Western Blot with S100A9 Monoclonal Antibody at dilution of 1:500. Lane A: HL-60 Whole Cell Lysate, Lysates/proteins at 30 µg per lane. <b>Observed-MW:15 kDa</b> <b>Calculated-MW:13 kDa</b>	
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	

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S100 protein is a family of low molecular weight protein found in vertebrates characterized by two EF-hand calciumbinding motifs. There are at least 21 different S100 proteins, and the name is derived from the fact that the protein is 10 0% 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, S100A 9, and CAGB, is a member of the S-100 family. S100A9 is expressed by macrophages in acutely inflammed 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.