

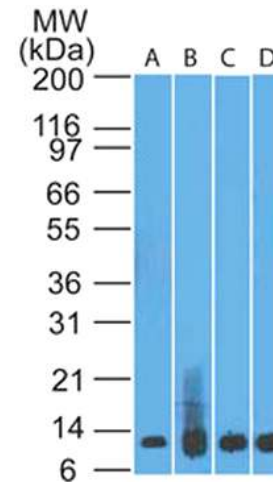
S100A8 Monoclonal Antibody (Clone IMG48M7C7)

ALTERNATE NAMES:	Calgranulin-A, Calprotectin L1L subunit, Cystic fibrosis antigen, CFAG, Leukocyte L1 complex light chain, Migration inhibitory factor-related protein 8, S100 calcium-binding protein A8, Urinary stone protein band A
CATALOG #:	6196-100
AMOUNT:	100 µg
HOST:	Mouse
ISOTYPE:	IgG2b, Kappa
PURIFICATION:	Protein G Chromatography
IMMUNOGEN:	Amino acids 2-93 of human S100A8
FORM:	Liquid
FORMULATION:	0.1 mg antibody in 0.2 ml PBS containing 0.05% BSA and 0.05% sodium azide.
SPECIES REACTIVITY:	Human, Mouse
STORAGE CONDITIONS:	Store antibody at 4°C, stable for six months. For long-term storage, aliquot and store antibody at -20°C.

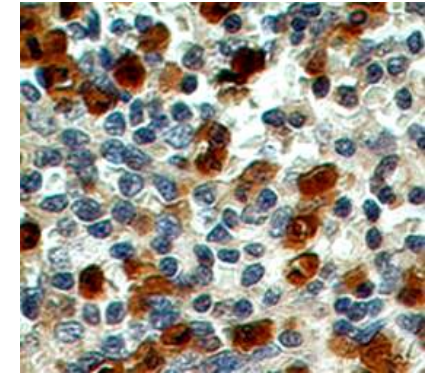
DESCRIPTION: S100A8 is a low-molecular weight member of the S100 family of calcium-binding protein which promotes tumorigenesis. It promotes cell migration and invasion through p38 MAP dependent NF-kappaB activation leading to an increase of MMP2 and MMP12 in gastric cancer. The phagocyte-specific Ca²⁺-binding S100A8 protein has been proposed as an essential regulator of the plasma membrane NADPH oxidase activity. It is abundantly expressed in the cytosol of neutrophils and is able to form Ca²⁺-dependent heterocomplexes, with heterotetramers being a probable prerequisite for its biological activities in myeloid cells. S100A8 and S100A9 have been proposed as essential regulators that exert their role through interactions with NADPH oxidase subunits. S100A8 and S100A9 are generally considered proinflammatory. Whereas hypohalous acids generated by activated phagocytes promote novel modifications in murine S100A8 but modifications to human S100A8 are undefined and there is no evidence that these proteins scavenge oxidants in human disease. Oxidized S100A8 was prominent in lungs from patients with asthma and significantly elevated in sputum compared to controls. Results have broad implications for conditions under which hypohalous acid oxidants are generated by activated phagocytes. Identification in human disease of the novel S100A8 Cys derivatives typical of those generated in vitro strongly supports the notion that S100A8 contributes to antioxidant defense

APPLICATION: IHC (P): use antibody at 2 µg/ml, Western blot analysis: 0.5-5 µg/ml.

Note: This information is only intended as a guide. The optimal dilutions must be determined by the user.



Western blot analysis of S100A8 in A) recombinant protein, B) human spleen, C) HL60 and D) PC3 lysate using S100A8 antibody at 0.5 µg/ml.



Formalin-fixed, paraffin-embedded human spleen stained with S100A8 antibody (2 µg/ml), peroxidase-conjugate and DAB chromogen.

RELATED PRODUCTS:

- S100 Antibody (Cat. No. 3958-100)
- S100 Blocking peptide (Cat. No. 3958BP-50)

FOR RESEARCH USE ONLY! Not to be used on humans.