10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-S100A4 Antibody

Mouse Monoclonal Antibody
Catalog # AH13491

Product Information

Application	WB, IHC-P, IF, FC
Primary Accession	P26447
Other Accession	654444
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	S100A4/1481
Calculated MW	11729

Additional Information

Gene ID	6275
Other Names	S100A4; S100 calcium-binding protein A4; Calvasculin; CAPL; Fibroblast specific protein 1 (FSP1); Leukemia multidrug resistance associated protein; Malignant transformation suppression 1 (MTS1); Metastasin; Placental calcium-binding protein
Application Note	Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (1-2ug/ml); ,Western Blotting (0.5-1ug/ml),Immunohistology (Formalin-fixed) (0.25-0.5ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.
Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Anti-S100A4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

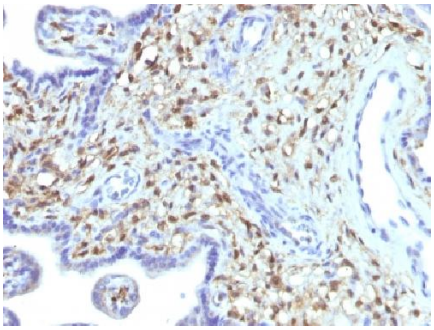
Name	S100A4
Synonyms	CAPL, MTS1

Function	Calcium-binding protein that plays a role in various cellular processes including motility, angiogenesis, cell differentiation, apoptosis, and autophagy (PubMed:16707441, PubMed:23752197, PubMed:30713770). Increases cell motility and invasiveness by interacting with non-muscle myosin heavy chain (NMMHC) IIA/MYH9 (PubMed:16707441). Mechanistically, promotes filament depolymerization and increases the amount of soluble myosin-IIA, resulting in the formation of stable protrusions facilitating chemotaxis (By similarity). Also modulates the pro-apoptotic function of TP53 by binding to its C-terminal transactivation domain within the nucleus and reducing its protein levels (PubMed:23752197). Within the extracellular space, stimulates cytokine production including granulocyte colony- stimulating factor and CCL24 from T-lymphocytes (By similarity). In addition, stimulates T-lymphocyte chemotaxis by acting as a chemoattractant complex with PGLYRP1 that promotes lymphocyte migration via CCR5 and CXCR3 receptors (PubMed:26654597, PubMed:30713770).
Cellular Location	Secreted. Nucleus Cytoplasm {ECO:0000250|UniProtKB:P07091}
Tissue Location	Ubiquitously expressed.

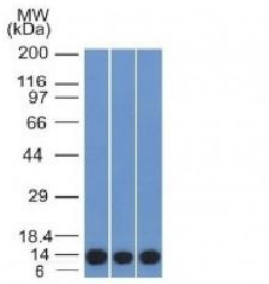
Background

S100A4 belongs to the S100 super-family of proteins containing 2 EF-hand calcium-binding domains. S100 genes include at least 25 members, including S100A1-S100A18, trichohyalin, filaggrin, repetin, S100P, and S100Z. S100A4 exerts its function via direct interaction with a number of proteins including P53, P63, non-muscle myosin IIA, α6β4 integrin, and liprin b1. S100A4 is overexpressed in highly metastatic cancers, which makes it useful as a marker of tumor progression.

Images



Formalin--paraffin human Placenta stained with S100A4 Monoclonal Antibody (S100A4/1481).



Western Blot of HeLa, A549 and A375 Cell Lysate using S100A4 Monoclonal Antibody (S100A4/1481).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.