

Anti-S100A4 Antibody Mouse Monoclonal Antibody Catalog # AH13493

Specification

Anti-S100A4 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

WB, IHC-P, IF, FC <u>P26447</u> <u>654444</u> Human, Mouse Mouse Monoclonal Mouse / IgG1, kappa 11729

Anti-S100A4 Antibody - 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 WB~~1:1000<br \>IHC-P~~N/A<br \>IF~~1:50~200<br \>FC~~1:10~50

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.

Anti-S100A4 Antibody - 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 colonystimulating 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}

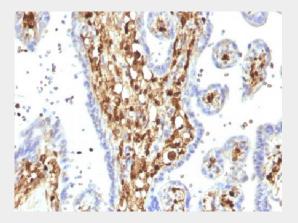
Tissue Location Ubiquitously expressed.

Anti-S100A4 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

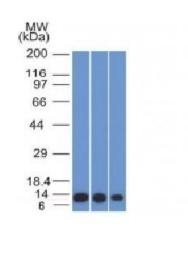
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-S100A4 Antibody - Images



Formalin--paraffin human Placenta stained with S100A4 Monoclonal Antibody (S100A4/1482).





Western Blot of HeLa, A549 and A375 Cell Lysate using S100A4 Monoclonal Antibody (S100A4/1482).

Anti-S100A4 Antibody - 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, α 6 β 4 integrin, and liprin b1. S100A4 is overexpressed in highly metastatic cancers, which makes it useful as a marker of tumor progression.