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S100A4 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11782a

Specification

S100A4 Antibody (N-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P26447
Other Accession	P07091, P35466, NP_062427.1, NP_002952.1
Reactivity	**Mouse**
Predicted	**Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**11729**
Antigen Region	**1-30**

S100A4 Antibody (N-term) - Additional Information

Gene ID 6275

Other Names
Protein S100-A4, Calvasculin, Metastasin, Placental calcium-binding protein, Protein Mts1, S100 calcium-binding protein A4, S100A4, CAPL, MTS1

Target/Specificity
This S100A4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human S100A4.

Dilution
WB~~1:1000
IHC-P~~1:50~100

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
S100A4 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

S100A4 Antibody (N-term) - 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). Modulates also 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:30713770, PubMed:26654597).

Cellular Location
Secreted. Nucleus Cytoplasm {ECO:0000250|UniProtKB:P07091}

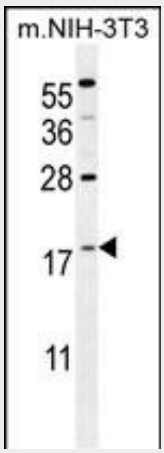
Tissue Location
Ubiquitously expressed.

S100A4 Antibody (N-term) - Protocols

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

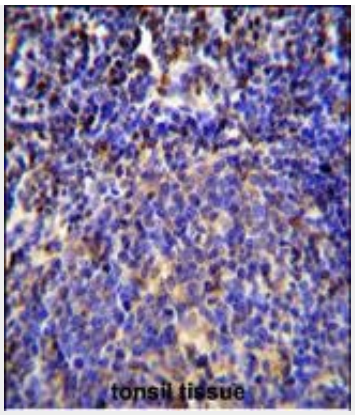
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

S100A4 Antibody (N-term) - Images



S100A4 Antibody (N-term) (Cat. #AP11782a) western blot analysis in mouse NIH-3T3 cell line lysates (35ug/lane).This demonstrates the S100A4 antibody detected the S100A4 protein (arrow).

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S100A4 Antibody (N-term) (Cat. #AP11782a)immunohistochemistry analysis in formalin fixed and paraffin embedded human tonsil tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of S100A4 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

S100A4 Antibody (N-term) - Background

The protein encoded by this gene is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. S100 proteins are localized in the cytoplasm and/or nucleus of a wide range of cells, and involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. S100 genes include at least 13 members which are located as a cluster on chromosome 1q21. This protein may function in motility, invasion, and tubulin polymerization. Chromosomal rearrangements and altered expression of this gene have been implicated in tumor metastasis. Multiple alternatively spliced variants, encoding the same protein, have been identified.

S100A4 Antibody (N-term) - References

Ma, X., et al. Cancer Lett. 299(2):171-181(2010)
Miranda, K.J., et al. J. Biol. Chem. 285(41):31517-31524(2010)
van Dieck, J., et al. FEBS Lett. 584(15):3269-3274(2010)
Cunningham, M.F., et al. Am. J. Physiol. Gastrointest. Liver Physiol. 299 (2), G457-G466 (2010) :
Mencia, N., et al. BMC Cancer 10, 250 (2010) :