

**Goat Anti-S100A4 / CAPL Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1950a****Specification**

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**Goat Anti-S100A4 / CAPL Antibody - Product Information**

Application	WB, IHC, E
Primary Accession	<a href="#">P26447</a>
Other Accession	<a href="#">NP_062427</a> , <a href="#">6275</a> , <a href="#">20198 (mouse)</a> , <a href="#">24615 (rat)</a>
Reactivity	Human
Predicted	Mouse, Rat, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	11729

**Goat Anti-S100A4 / CAPL Antibody - 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

**Dilution**WB~~1:1000  
IHC~~1:100~500  
E~~N/A**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-S100A4 / CAPL Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-S100A4 / CAPL 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:<a href="http://www.uniprot.org/citations/16707441" target="\_blank">16707441</a>, PubMed:<a href="http://www.uniprot.org/citations/23752197" target="\_blank">23752197</a>, PubMed:<a href="http://www.uniprot.org/citations/30713770" target="\_blank">30713770</a>). Increases cell motility and invasiveness by interacting with non-muscle myosin heavy chain (NMMHC) IIA/MYH9 (PubMed:<a href="http://www.uniprot.org/citations/16707441" target="\_blank">16707441</a>). 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:<a href="http://www.uniprot.org/citations/23752197" target="\_blank">23752197</a>). 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:<a href="http://www.uniprot.org/citations/26654597" target="\_blank">26654597</a>, PubMed:<a href="http://www.uniprot.org/citations/30713770" target="\_blank">30713770</a>).

**Cellular Location**

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

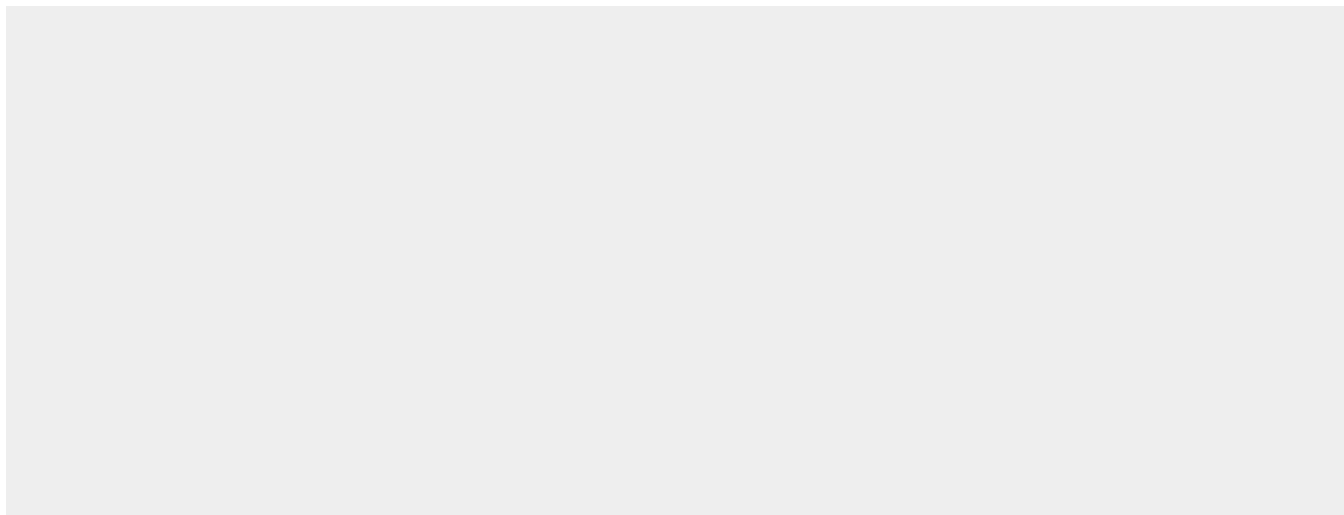
**Tissue Location**

Ubiquitously expressed.

**Goat Anti-S100A4 / CAPL Antibody - Protocols**

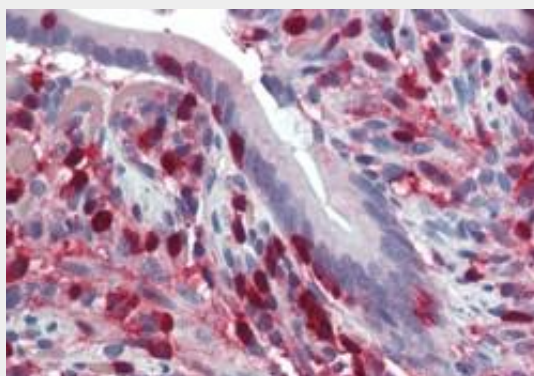
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Goat Anti-S100A4 / CAPL Antibody - Images**

250kDa  
150kDa  
100kDa  
75kDa  
50kDa  
37kDa  
25kDa  
20kDa  
15kDa  
10kDa

AF1950a (0.03 µg/ml) staining of Human Placenta lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF1950a (2.5 µg/ml) staining of paraffin embedded Human Small Intestine. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

#### **Goat Anti-S100A4 / CAPL Antibody - 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.

#### **Goat Anti-S100A4 / CAPL Antibody - References**

S100 proteins interact with the N-terminal domain of MDM2. van Dieck J, et al. FEBS Lett, 2010 Aug 4. PMID 20591429.  
Overexpression of S100A4 in human cancer cell lines resistant to methotrexate. Menc a N, et al. BMC Cancer, 2010 Jun 1. PMID 20515499.  
S100A4 expression is increased in stricture fibroblasts from patients with fibrostenosing Crohn's disease and promotes intestinal fibroblast migration. Cunningham MF, et al. Am J Physiol Gastrointest Liver Physiol, 2010 Aug. PMID 20489045.  
Subcellular distribution of S100A4 and its transcriptional regulation under hypoxic conditions in gastric cancer cell line BGC823. Zhang R, et al. Cancer Sci, 2010 May. PMID 20367639.

Genetic risk factors for hepatopulmonary syndrome in patients with advanced liver disease. Roberts KE, et al. Gastroenterology, 2010 Jul. PMID 20346360.