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

S100A4 Recombinant Rabbit mAb

Catalog # AP96636

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P07091
Other Accession	P07091
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Recombinant
Calculated MW	11721
Physical State	Liquid
Immunogen	Recombinant Mouse S100A4 protein
Isotype	IgG
Purity	Affinity Purification
Buffer	PBS with 100 □g/ml BSA,0.15% ProClin300 and 50% glycerol.
SIMILARITY	Belongs to the S-100 family. Contains 2 EF-hand domains.
SUBUNIT	Homodimer. Interacts with PPFIBP1 in a calcium-dependent mode.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

Gene ID	20198
Other Names	MTS1; 18A2; 42A; CAPL; FSP1; P9KA; PEL98; metastasin; pk9a; RNP9KA; S10A4_BOVIN; S100A4; Placental calcium-binding protein homolog; S100 calcium-binding protein A4; S10A4_CANLF; S10A4_HUMAN; Calvasculin; Placental calcium-binding protein; Protein Mts1; S10A4_MOUSE; Metastatic cell protein; Protein 18A2; S10A4_RAT; Nerve growth factor-induced protein 42A; P9K; S100 calcium binding protein A4; metastasin 1; calcium placental protein; S100 calcium-binding protein A4 (calcium protein, calvasculin, metastasin, murine placental homolog); fibroblast-specific protein-1; murine placental homolog
Dilution	WB=1: 500-2000,IHC-P=1:100-500,IF=1:100-500,IHC-F=1:100-500,Flow-Cyt=1:50-100

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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:20519440). Increases cell motility and invasiveness by interacting with non-muscle myosin heavy chain (NMMHC) IIA/MYH9 (PubMed:8051043). Mechanistically, promotes filament depolymerization and increases the amount of soluble myosin-IIA, resulting in the formation of stable protrusions facilitating chemotaxis (PubMed:8051043). Also modulates the pro-apoptotic function of TP53 by binding to its C-terminal transactivation domain within the nucleus and reducing its protein levels (By similarity). Within the extracellular space, stimulates cytokine production including granulocyte colony-stimulating factor and CCL24 from T-lymphocytes (PubMed:20103644). In addition, stimulates T-lymphocyte chemotaxis by acting as a chemoattractant complex with PGLYRP1 that promotes lymphocyte migration via CCR5 and CXCR3 receptors (By similarity).
Cellular Location	Secreted {ECO:0000250|UniProtKB:P26447}. Nucleus {ECO:0000250|UniProtKB:P26447}. Cytoplasm
Tissue Location	Specifically expressed in different metastatic cells

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