



Rabbit Anti-AFAP antibody

SL9790R

Product Name:	AFAP
Chinese Name:	微丝相关蛋白1抗体
Alias:	110 kDa actin filament associated protein; 110 kDa actin filament-associated protein; Actin filament associated protein 1; Actin filament associated protein 110 kDa; Actin filament-associated protein 1; AFAP 1; AFAP 110; AFAP; AFAP-110; Afap1; AFAP1 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Cow,Horse,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	81kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human AFAP:277-345/730
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	Actin filament associated protein (AFAP-110) interacts directly with Actin filaments through its C-terminal Actin binding domain. AFAP-110 contains additional protein-binding domains as well, and serves as an adaptor protein. AFAP-110 links signaling molecules to Actin filaments, provides a platform for the preparation of larger signaling

complexes, activates Src kinases in response to cellular signals and also directly affects Actin organization as an Actin filament cross-linking protein. Deletion of certain binding elements of AFAP-110 results in altered Actin phenotypes; for instance, deletion of the leucine zipper motif causes repositioning of Actin into rosettes. Because inhibition of certain Actin cytoskeletal conformations inhibits cell division and movement, these conformational changes to AFAP-110, and thus Actin organization in the cell, represent a possible therapeutic target for controlling tumorigenesis and metastasis.

Function:

Can cross-link actin filaments into both network and bundle structures (By similarity). May modulate changes in actin filament integrity and induce lamellipodia formation. May function as an adapter molecule that links other proteins, such as SRC and PKC to the actin cytoskeleton. Seems to play a role in the development and progression of prostate adenocarcinoma by regulating cell-matrix adhesions and migration in the cancer cells.

Subunit:

Monomer and homomultimer. Interacts via its C-terminus with F-actin; probably involving AFAP1 multimers (By similarity). Interacts with activated SRC SH3-SH2 domains. Interacts via its PH 1 domain with PRKCA, PRKCB and PRKCI (By similarity).

Subcellular Location:

Cytoplasm, cytoskeleton. Note=Localizes with stress fibers in quiescent cells, concentrated in cell motility structures such as lamellipodia, filopodia and membrane ruffles upon their induction.

Tissue Specificity:

Low expression in normal breast epithelial cell line MCF-10A and in tumorigenic breast cancer cell lines MCF-7, T-47D and ZR75-1. Highly expressed in the invasive breast cancer cell lines MDA-MB-231 and MDA-MB-435. Overexpressed in prostate carcinoma.

Post-translational modifications:

Phosphorylated on tyrosine residues by SRC.

Similarity:

Contains 2 PH domains.

SWISS:

Q8N556

Gene ID:

60312

Database links:

[Entrez Gene: 60312](#)Human

[Entrez Gene: 70292](#)Mouse

[Entrez Gene: 140935](#)Rat

[Omim: 608252](#)Human

[SwissProt: Q8N556](#)Human

[SwissProt: Q80YS6](#)Mouse

[SwissProt: Q8VH46](#)Rat

[Unigene: 529369](#)Human

[Unigene: 125167](#)Mouse

[Unigene: 208751](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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