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AFAP1 Antibody

Catalog # ASC11397

Product Information

Application	WB, E
Primary Accession	Q8N556
Other Accession	NP_940997, 197382472
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	80725
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	AFAP1 antibody can be used for detection of AFAP1 by Western blot at 1 - 2 g/mL.

Additional Information

Gene ID	60312
Other Names	Actin filament-associated protein 1, 110 kDa actin filament-associated protein, AFAP-110, AFAP1, AFAP
Target/Specificity	AFAP1; Monomer and homomultimer of AFAP1 are known to exist; AFAP1 antibody is predicted to not cross-react with other AFAP family members.
Reconstitution & Storage	AFAP1 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	AFAP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	AFAP1
Synonyms	AFAP
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.

Cellular Location	Cytoplasm, cytoskeleton, stress fiber
Tissue Location	Low expression in normal breast epithelial cell line MCF-10A and in tumorigenic breast cancer cell lines MCF-7, T-47D and ZR-75-1. Highly expressed in the invasive breast cancer cell lines MDA-MB-231 and MDA-MB-435. Overexpressed in prostate carcinoma

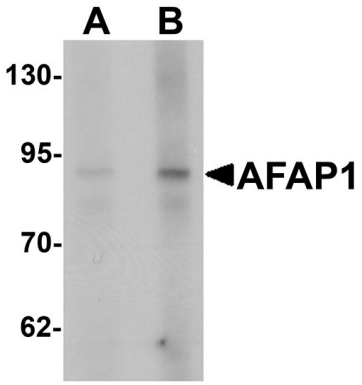
Background

AFAP1 Antibody: The actin filament-associated protein AFAP1 (AFAP-110) is an actin cross-linking protein first identified as a substrate of the viral oncogene v-Src. AFAP1 has a fundamental role in actin cytoskeleton arrangement. It contains a carboxyterminal actin-binding domain that directly binds to F-actin and serves as an adaptor protein in the regulation of SRC and PKC signal transduction by several functional domains, including 2 pleckstrin homology (PH) domains, a Src homology 3-binding (SH3-binding) motif, and several SH2-binding motifs. It is overexpressed in prostate carcinoma and contributes to tumor growth by regulating cell-matrix adhesions and migration in the cancer cells. AFAP1 represent a possible therapeutic target for controlling tumorigenesis and metastasis.

References

Flynn DC, Leu TH, Reynolds AB, et al. Identification and sequence analysis of cDNAs encoding a 110-kilodalton actin filament-associated pp60src substrate. Mol. Cell. Biol. 1993;13:7892-900.
Baisden JM, Gatesman AS, Cherezova L, et al. The intrinsic ability of AFAP-110 to alter actin filament integrity is linked with its ability to also activate cellular tyrosine kinases. Oncogene 2001; 20:6607-16.
Baisden JM, Qian Y, Zot HM, et al. The actin filament-associated protein AFAP-110 is an adaptor protein that modulates changes in actin filament integrity. Oncogene 2001; 20:6435-47.
Zhang J, Park SI, Artime MC, et al. AFAP-110 is overexpressed in prostate cancer and contributes to tumorigenic growth by regulating focal contacts. J. Clin. Invest. 2007; 117:2962-73.

Images



Western blot analysis of AFAP1 in Hela cell lysate with AFAP1 antibody at (A) 1 and (B) 2 µg/mL.