

AFAP1 Antibody

Catalog # ASC11397

## Specification

# AFAP1 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, E <u>O8N556</u> <u>NP\_940997</u>, <u>197382472</u> Human, Mouse Rabbit Polyclonal IgG AFAP1 antibody can be used for detection of AFAP1 by Western blot at 1 - 2 μg/mL.

### AFAP1 Antibody - Additional Information

Gene ID Target/Specifi 60312

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°C for three months and -20°C, 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.

## **AFAP1 Antibody - 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



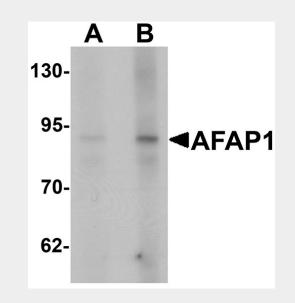
lines MCF-7, T-47D and ZR-75-1. Highly expressed in the invasive breast cancer cell lines MDA-MB-231 and MDA-MB-435. Overexpressed in prostate carcinoma

## AFAP1 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### AFAP1 Antibody - Images



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

### AFAP1 Antibody - 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.

### AFAP1 Antibody - 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.