

AFAP-1L2 (E-12): sc-138089

BACKGROUND

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. By linking signaling molecules to Actin filaments, AFAP-110 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. AFAP-1L2 (Actin filament-associated protein 1-like 2), also known as XB130, is a 818 amino acid cytoplasmic protein that contains 2 Pleckstrin homology (PH) domains, which are normally found in proteins involved in intracellular signaling. Like its relative AFAP-110, AFAP-1L2 interacts with Src kinase and may play a role in Src-regulated transcription activation. AFAP-1L2 is expressed in thyroid and spleen and can also be detected at lower levels in lung, brain, pancreas and kidney. There are four isoforms of AFAP-1L2 that are produced as a result of alternative splicing events.

REFERENCES

1. Gatesman, A., et al. 2004. Protein kinase C α activates c-Src and induces podosome formation via AFAP-110. *Mol. Cell. Biol.* 24: 7578-7597.
2. Deloukas, P., et al. 2004. The DNA sequence and comparative analysis of human chromosome 10. *Nature* 429: 375-381.
3. Zhang, Y., et al. 2005. Time-resolved mass spectrometry of tyrosine phosphorylation sites in the epidermal growth factor receptor signaling network reveals dynamic modules. *Mol. Cell. Proteomics* 4: 1240-1250.
4. Rikova, K., et al. 2007. Global survey of phosphotyrosine signaling identifies oncogenic kinases in lung cancer. *Cell* 131: 1190-1203.
5. Xu, J., et al. 2007. XB130, a novel adaptor protein for signal transduction. *J. Biol. Chem.* 282: 16401-16412.
6. Emaduddin, M., et al. 2008. Odin (ANKS1A) is a Src family kinase target in colorectal cancer cells. *Cell Commun. Signal.* 6: 7.

CHROMOSOMAL LOCATION

Genetic locus: AFAP1L2 (human) mapping to 10q25.3; Afap1l2 (mouse) mapping to 19 D2.

SOURCE

AFAP-1L2 (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of AFAP-1L2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138089 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4 $^{\circ}$ C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

AFAP-1L2 (E-12) is recommended for detection of AFAP-1L2 isoforms 1-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with AFAP-1L1.

AFAP-1L2 (E-12) is also recommended for detection of AFAP-1L2 isoforms 1-3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for AFAP-1L2 siRNA (h): sc-90824, AFAP-1L2 siRNA (m): sc-140896, AFAP-1L2 shRNA Plasmid (h): sc-90824-SH, AFAP-1L2 shRNA Plasmid (m): sc-140896-SH, AFAP-1L2 shRNA (h) Lentiviral Particles: sc-90824-V and AFAP-1L2 shRNA (m) Lentiviral Particles: sc-140896-V.

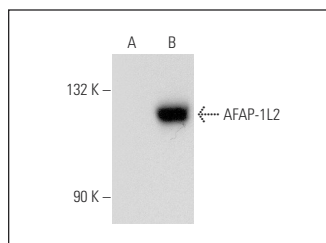
Molecular Weight of AFAP-1L2: 130 kDa.

Positive Controls: AFAP-1L2 (h): 293T Lysate: sc-113604.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



AFAP-1L2 (E-12): sc-138089. Western blot analysis of AFAP-1L2 expression in non-transfected: sc-117752 (A) and human AFAP-1L2 transfected: sc-113604 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.