

AFAP-1L2 (S-12): sc-138091

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 (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region 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-138091 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

AFAP-1L2 (S-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.

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.

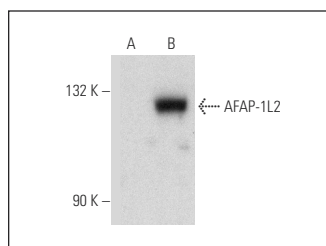
Molecular Weight of AFAP-1L2: 130 kDa.

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 (S-12): sc-138091. 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.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

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