SANTA CRUZ BIOTECHNOLOGY, INC.

AFAP-1L2 (12): sc-136176

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The Power to Question

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., Walker, V.G., Baisden, J.M., Weed, S.A. and Flynn, D.C. 2004. Protein kinase Cα activates c-Src and induces podosome formation via AFAP-110. Mol. Cell. Biol. 24: 7578-7597.
2. Deloukas, P., Earthrowl, M.E., Grafham, D.V., Rubenfield, M., French, L., Steward, C.A., Sims, S.K., Jones, M.C., Searle, S., Scott, C., Howe, K., Hunt, S.E., Andrews, T.D., Gilbert, J.G., et al. 2004. The DNA sequence and comparative analysis of human chromosome 10. Nature 429: 375-381.
3. Zhang, Y., Wolf-Yadlin, A., Ross, P.L., Pappin, D.J., Rush, J., Lauffenburger, D.A. and White, F.M. 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.

CHROMOSOMAL LOCATION

Genetic locus: AFAP1L2 (human) mapping to 10q25.3.

SOURCE

AFAP-1L2 (12) is a mouse monoclonal antibody raised against recombinant AFAP-1L2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

AFAP-1L2 (12) is available conjugated to agarose (sc-136176 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-136176 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-136176 PE), fluorescein (sc-136176 FITC), Alexa Fluor® 488 (sc-136176 AF488), Alexa Fluor® 546 (sc-136176 AF546), Alexa Fluor® 594 (sc-136176 AF594) or Alexa Fluor® 647 (sc-136176 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-136176 AF680) or Alexa Fluor® 790 (sc-136176 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

AFAP-1L2 (12) is recommended for detection of AFAP-1L2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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

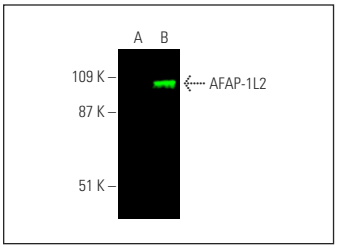
Molecular Weight of AFAP-1L2: 130 kDa.

Positive Controls: ACHN whole cell lysate: sc-364365 or AFAP-1L2 (h): 293T Lysate: sc-113604.

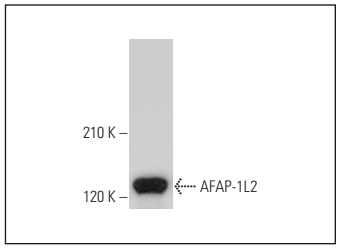
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



AFAP-1L2 (12): sc-136176. Near-infrared 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. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgGκ BP-CFL 680: sc-516180.



AFAP-1L2 (12): sc-136176. Western blot analysis of AFAP-1L2 expression in ACHN whole cell lysate.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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