SANTA CRUZ BIOTECHNOLOGY, INC.

AFAP-1L1 (m): 293T Lysate: sc-178261

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-1L1 (Actin filament-associated protein 1-like 1) is a 768 amino acid protein that, like its relative AFAP110, contains two Pleckstrin homology (PH) domains, which are normally found in proteins involved in intracellular signaling. AFAP-1L1 is phosphorylated upon DNA damage, probably by ATR or Atm. There are four isoforms of AFAP-1L1 that are produced as a result of alternative splicing events.

REFERENCES

1. Musacchio, A., et al. 1993. The PH domain: a common piece in the structural patchwork of signalling proteins. Trends Biochem. Sci. 18: 343-348.
2. Qian, Y., et al. 2000. The carboxy terminus of AFAP-110 modulates direct interactions with Actin filaments and regulates its ability to alter Actin filament integrity and induce lamellipodia formation. Exp. Cell Res. 255: 102-113.
3. Baisden, J.M., et al. 2001. The Actin filament-associated protein AFAP-110 is an adaptor protein that modulates changes in Actin filament integrity. Oncogene 20: 6435-6447.
4. Baisden, J.M., et al. 2001. The intrinsic ability of AFAP-110 to alter Actin filament integrity is linked with its ability to also activate cellular tyrosine kinases. Oncogene 20: 6607-6616.
5. Lodyga, M., et al. 2002. Molecular cloning of Actin filament-associated protein: a putative adaptor in stretch-induced Src activation. Am. J. Physiol. Lung Cell. Mol. Physiol. 283: L265-L274.
6. Jikuya, H., et al. 2003. Characterization of long cDNA clones from human adult spleen. II. The complete sequences of 81 cDNA clones. DNA Res. 10: 49-57.
7. Han, B., et al. 2004. Conversion of mechanical force into biochemical signaling. J. Biol. Chem. 279: 54793-54801.
8. Gatesman, A., et al. 2004. Protein kinase Cα activates c-Src and induces podosome formation via AFAP-110. Mol. Cell. Biol. 24: 7578-7597.

CHROMOSOMAL LOCATION

Genetic locus: Afap1l1 (mouse) mapping to 18 E1.

PRODUCT

AFAP-1L1 (m): 293T Lysate represents a lysate of mouse AFAP-1L1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

AFAP-1L1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive AFAP-1L1 antibodies. Recommended use: 10-20 µl per lane.

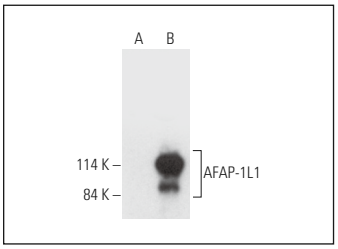
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

AFAP-1L1 (D-6): sc-514788 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse AFAP-1L1 expression in AFAP-1L1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

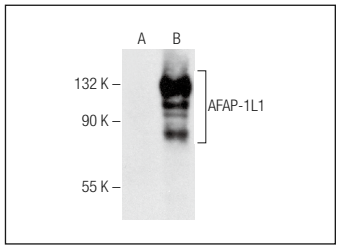
RECOMMENDED SUPPORT REAGENTS

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.

DATA



AFAP-1L1 (D-6): sc-514788. Western blot analysis of AFAP-1L1 expression in non-transfected: sc-117752 (**A**) and mouse AFAP-1L1 transfected: sc-178261 (**B**) 293T whole cell lysates.



AFAP-1L1 (D-7): sc-376700. Western blot analysis of AFAP-1L1 expression in non-transfected: sc-117752 (**A**) and mouse AFAP-1L1 transfected: sc-178261 (**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 for detailed protocols and support products.