

AFAP-1L1 (h): 293T Lysate: sc-115974

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 2 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., Gibson, T., Rice, P., Thompson, J. and Saraste, M. 1993. The PH domain: a common piece in the structural patchwork of signalling proteins. *Trends Biochem. Sci.* 18: 343-348.
2. Qian, Y., Baisden, J.M., Zot, H.G., Van Winkle, W.B. and Flynn, D.C. 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., Qian, Y., Zot, H.M. and Flynn, D.C. 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., Gatesman, A.S., Cherezova, L., Jiang, B.H. and Flynn, D.C. 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., Bai, X.H., Mourgeon, E., Han, B., Keshavjee, S. and Liu, M. 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., Takano, J., Kikuno, R., Hirose, M., Nagase, T., Nomura, N. and Ohara, O. 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., Bai, X.H., Lodyga, M., Xu, J., Yang, B.B., Keshavjee, S., Post, M. and Liu, M. 2004. Conversion of mechanical force into biochemical signaling. *J. Biol. Chem.* 279: 54793-54801.
8. Gatesman, A., Walker, V.G., Baisden, J.M., Weed, S.A. and Flynn, D.C. 2004. Protein kinase C α activates c-Src and induces podosome formation via AFAP-110. *Mol. Cell. Biol.* 24: 7578-7597.

CHROMOSOMAL LOCATION

Genetic locus: AFAP1L1 (human) mapping to 5q32.

RESEARCH USE

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

PRODUCT

AFAP-1L1 (h): 293T Lysate represents a lysate of human AFAP-1L1 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

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

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

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.

PROTOCOLS

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