

BAIAP2L1 (N-12): sc-104102

BACKGROUND

BAIAP2L1 (brain-specific angiogenesis inhibitor 1-associated protein 2-like 1), also known as IRTKS (Insulin receptor tyrosine kinase substrate), is a widely expressed, 511 amino acid protein with predominant expression in liver, testes, bladder, lung and heart. It contains one IMD (IRSp53/MTSS1 homology) domain, one SH3 domain and a C-terminal region that is similar to a WH2 domain. Other proteins containing the IMD domain, such as IRSp53 and MTSS1, are known to participate in Actin filament bundling and induction of filopodia-like protrusions. BAIAP2L1 is closely related to IRSp53 but, unlike the filopodia-like protrusions caused by IRSp53, expression of BAIAP2L1 results in short Actin clusters around the periphery of the cell. Similar to IRSp53, BAIAP2L1 is a substrate for the Insulin receptor (Insulin R) and undergoes tyrosine phosphorylation upon stimulation with Insulin. In addition, BAIAP2L1 is capable of binding Rac via its N-terminal IMD domain.

REFERENCES

1. Yeh, T.C., Ogawa, W., Danielsen, A.G. and Roth, R.A. 1996. Characterization and cloning of a 58/53-kDa substrate of the Insulin receptor tyrosine kinase. *J. Biol. Chem.* 271: 2921-2928.
2. Millard, T.H., Bompard, G., Heung, M.Y., Dafforn, T.R., Scott, D.J., Machesky, L.M. and Fütterer, K. 2005. Structural basis of filopodia formation induced by the IRSp53/MIM homology domain of human IRSp53. *EMBO J.* 24: 240-250.
3. Disanza, A., Mantoani, S., Hertzog, M., Gerboth, S., Frittoli, E., Steffen, A., Berhoerster, K., Kreienkamp, H.J., Milanesi, F., Di Fiore, P.P., Ciliberto, A., Stradal, T.E. and Scita, G. 2006. Regulation of cell shape by Cdc42 is mediated by the synergic Actin-bundling activity of the Eps8-IRSp53 complex. *Nat. Cell Biol.* 8: 1337-1347.
4. Suetsugu, S., Murayama, K., Sakamoto, A., Hanawa-Suetsugu, K., Seto, A., Oikawa, T., Mishima, C., Shirouzu, M., Takenawa, T. and Yokoyama, S. 2006. The RAC binding domain/IRSp53-MIM homology domain of IRSp53 induces RAC-dependent membrane deformation. *J. Biol. Chem.* 281: 35347-35358.
5. Galligan, C.L., Baig, E., Bykerk, V., Keystone, E.C. and Fish, E.N. 2007. Distinctive gene expression signatures in rheumatoid arthritis synovial tissue fibroblast cells: correlates with disease activity. *Genes Immun.* 8: 480-491.

CHROMOSOMAL LOCATION

Genetic locus: BAIAP2L1 (human) mapping to 7q21.3.

SOURCE

BAIAP2L1 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of BAIAP2L1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-104102 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

BAIAP2L1 (N-12) is recommended for detection of BAIAP2L1 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)], 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 family member BAIAP2L2.

Suitable for use as control antibody for BAIAP2L1 siRNA (h): sc-89810, BAIAP2L1 shRNA Plasmid (h): sc-89810-SH and BAIAP2L1 shRNA (h) Lentiviral Particles: sc-89810-V.

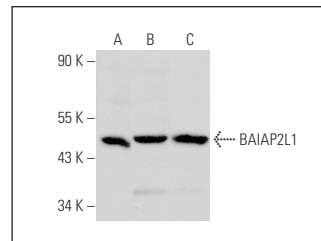
Molecular Weight of BAIAP2L1: 60 kDa.

Positive Controls: BAIAP2L1 (h): 293T Lysate: sc-176902, U-698-M whole cell lysate: sc-364799 or U-2 OS cell lysate: sc-2295.

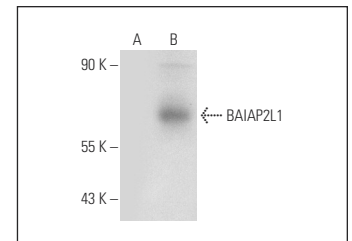
RECOMMENDED SECONDARY REAGENTS

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



BAIAP2L1 (N-12): sc-104102. Western blot analysis of BAIAP2L1 expression in U-698-M (A), U-2 OS (B) and U-87 MG (C) whole cell lysates.



BAIAP2L1 (N-12): sc-104102. Western blot analysis of BAIAP2L1 expression in non-transfected: sc-117752 (A) and human BAIAP2L1 transfected: sc-176902 (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.

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.