

BAIAP2L1 (A-14): sc-100680

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, testis, 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., et al. 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., et al. 2005. Structural basis of filopodia formation induced by the IRSp53/MIM homology domain of human IRSp53. *EMBO J.* 24: 240-250.
3. Disanza, A., et al. 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., et al. 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., et al. 2007. Distinctive gene expression signatures in rheumatoid arthritis synovial tissue fibroblast cells: correlates with disease activity. *Genes Immun.* 8: 480-491.
6. Millard, T.H., et al. 2007. Characterisation of IRTKS, a novel IRSp53/MIM family Actin regulator with distinct filament bundling properties. *J. Cell Sci.* 120: 1663-1672.

CHROMOSOMAL LOCATION

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

SOURCE

BAIAP2L1 (A-14) is a mouse monoclonal antibody raised against recombinant BAIAP2L1 of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

BAIAP2L1 (A-14) 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

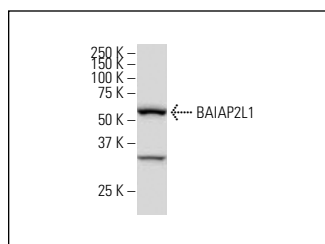
Molecular Weight of BAIAP2L1: 60 kDa.

Positive Controls: HeLa nuclear extract: sc-2120.

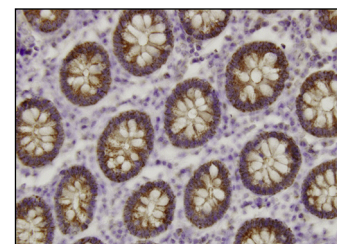
RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



BAIAP2L1 (A-14): sc-100680. Western blot analysis of BAIAP2L1 expression in HeLa nuclear extract.



BAIAP2L1 (A-14): sc-100680. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human colon tissue showing membrane and cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Oikawa, T. and Matsuo, K. 2012. Possible role of IRTKS in Tks5-driven osteoclast fusion. *Commun. Integr. Biol.* 5: 511-515.
2. Jian, Y.K., et al. 2019. Thrombospondin 1 triggers osteosarcoma cell metastasis and tumor angiogenesis. *Oncol. Res.* 27: 211-218.

RESEARCH USE

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