

# BAIAP2L2 (C-9): sc-377396

## BACKGROUND

The Src homology 3 (SH3) domain is a highly conserved 60 amino acid protein domain that is organized into a  $\beta$ -barrel fold consisting of 5 or 6  $\beta$  strands arranged as 2 tightly packed anti-parallel  $\beta$  sheets. This domain is found in proteins that mediate assembly of specific protein complexes and interact with other proteins, specifically recognizing proline-rich regions. BAIAP2L2 (brain-specific angiogenesis inhibitor 1-associated protein 2-like protein 2) is a 529 amino acid protein containing an SH3 domain, suggesting that it may function as an adaptor protein. BAIAP2L2 also contains an IMD (IRSp53/MIM) domain, which enables the protein to bind to and bundle Actin filaments, as well as bind to membranes and interact with Rac GTPase. There are two named isoforms of BAIAP2L2 which are produced as a result of alternative splicing events.

## REFERENCES

- Oda, K., et al. 1999. Identification of BAIAP2 (BAI-associated protein 2), a novel human homologue of hamster IRSp53, whose SH3 domain interacts with the cytoplasmic domain of BAI1. *Cytogenet. Cell Genet.* 84: 75-82.
- Dunham, I., et al. 1999. The DNA sequence of human chromosome 22. *Nature* 402: 489-495.
- Clark, H.F., et al. 2003. The secreted protein discovery initiative (SPDI), a large-scale effort to identify novel human secreted and transmembrane proteins: a bioinformatics assessment. *Genome Res.* 13: 2265-2270.
- Funato, Y., et al. 2004. IRSp53/Eps8 complex is important for positive regulation of Rac and cancer cell motility/invasiveness. *Cancer Res.* 64: 5237-5244.
- 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.
- Kudo, S., et al. 2007. Inhibition of tumor growth through suppression of angiogenesis by brain-specific angiogenesis inhibitor 1 gene transfer in murine renal cell carcinoma. *Oncol. Rep.* 18: 785-791.

## CHROMOSOMAL LOCATION

Genetic locus: BAIAP2L2 (human) mapping to 22q13.1; Baiap2l2 (mouse) mapping to 15 E1.

## SOURCE

BAIAP2L2 (C-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 405-437 within an internal region of BAIAP2L2 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgA kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-377396 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

BAIAP2L2 (C-9) is recommended for detection of BAIAP2L2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 BAIAP2L2 siRNA (h): sc-72606, BAIAP2L2 siRNA (m): sc-141467, BAIAP2L2 shRNA Plasmid (h): sc-72606-SH, BAIAP2L2 shRNA Plasmid (m): sc-141467-SH, BAIAP2L2 shRNA (h) Lentiviral Particles: sc-72606-V and BAIAP2L2 shRNA (m) Lentiviral Particles: sc-141467-V.

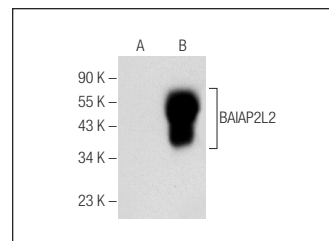
Molecular Weight of BAIAP2L2: 59 kDa.

Positive Controls: BAIAP2L2 (m): 293T Lysate: sc-118670.

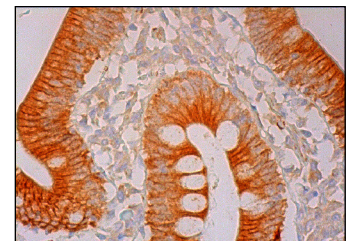
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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 L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  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-IgG $\kappa$  BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohisto-mount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



BAIAP2L2 (C-9): sc-377396. Western blot analysis of BAIAP2L2 expression in non-transfected: sc-117752 (A) and mouse BAIAP2L2 transfected: sc-118670 (B) 293T whole cell lysates.



BAIAP2L2 (C-9): sc-377396. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing membrane and cytoplasmic staining of glandular cells.

## 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.