

BAIAP3 (C-20): sc-130119

BACKGROUND

BAIAP3 (BAI-1-associated protein 3), also known as BAP3, is a 1,187 amino acid transmembrane protein that contains two C2 domains, one MHD1 domain and one MHD2 domain. One of several members of the secretin receptor family, BAIAP3 is preferentially expressed in brain, where it functions as an inhibitor of BAI-1 (brain-specific angiogenesis inhibitor I) and is thought to be involved in regulating synaptic functions. Additionally, BAIAP3 plays a role in the regulation of both tumor-associated exocytosis and oncogenic fusion and is a target of the tumor suppressor p53, suggesting that BAIAP3 is involved in cancer proliferation. Two isoforms of BAIAP3 exist due to alternative splicing events.

REFERENCES

- Shiratsuchi, T., Oda, K., Nishimori, H., Suzuki, M., Takahashi, E., Tokino, T. and Nakamura, Y. 1998. Cloning and characterization of BAP3 (BAI-associated protein 3), a C2 domain-containing protein that interacts with BAI-1. *Biochem. Biophys. Res. Commun.* 251: 158-165.
- Nagase, T., Ishikawa, K., Suyama, M., Kikuno, R., Miyajima, N., Tanaka, A., Kotani, H., Nomura, N. and Ohara, O. 1998. Prediction of the coding sequences of unidentified human genes. XI. The complete sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. *DNA Res.* 5: 277-286.
- Daniels, R.J., Peden, J.F., Lloyd, C., Horsley, S.W., Clark, K., Tufarelli, C., Kearney, L., Buckle, V.J., Doggett, N.A., Flint, J. and Higgs, D.R. 2001. Sequence, structure and pathology of the fully annotated terminal 2 Mb of the short arm of human chromosome 16. *Hum. Mol. Genet.* 10: 339-352.
- Chan, A.M. and Weber, T. 2002. A putative link between exocytosis and tumor development. *Cancer Cell* 2: 427-428.
- Palmer, R.E., Lee, S.B., Wong, J.C., Reynolds, P.A., Zhang, H., Truong, V., Oliner, J.D., Gerald, W.L. and Haber, D.A. 2002. Induction of BAIAP3 by the EWS-WT1 chimeric fusion implicates regulated exocytosis in tumorigenesis. *Cancer Cell* 2: 497-505.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 604009. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: BAIAP3 (human) mapping to 16p13.3.

SOURCE

BAIAP3 (C-20) is a purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of BAIAP3 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

BAIAP3 (C-20) is recommended for detection of BAIAP3 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 BAIAP3 siRNA (h): sc-93527, BAIAP3 shRNA Plasmid (h): sc-93527-SH and BAIAP3 shRNA (h) Lentiviral Particles: sc-93527-V.

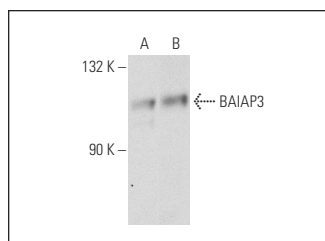
Molecular Weight of BAIAP3: 132 kDa.

Positive Controls: SW-13 cell lysate: sc-24778 or mouse testis extract: sc-2405

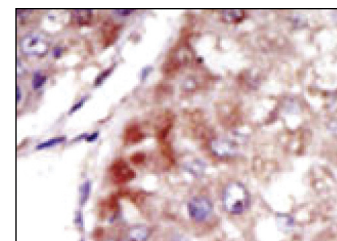
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



BAIAP3 (C-20): sc-130119. Western blot analysis of BAIAP3 expression in SW-13 whole cell lysate (A) and mouse testis tissue extract (B).



BAIAP3 (C-20): sc-130119. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cancer tissue showing cytoplasmic staining.

STORAGE

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

PROTOCOLS

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