

## BAIAP3 (E-14): sc-163726

### BACKGROUND

BAIAP3 (BAI1-associated protein 3), also known as BAP3, is a 1,187 amino acid transmembrane protein that contains 2 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., et al. 1998. Cloning and characterization of BAP3 (BAI-associated protein 3), a C2 domain-containing protein that interacts with BAI1. *Biochem. Biophys. Res. Commun.* 251: 158-165.
- Nagase, T., et al. 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., et al. 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., et al. 2002. A putative link between exocytosis and tumor development. *Cancer Cell* 2: 427-428.
- Palmer, R.E., et al. 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<sup>™</sup>. 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; Baiap3 (mouse) mapping to 17 A3.3.

### SOURCE

BAIAP3 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BAIAP3 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-163726 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### STORAGE

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

### APPLICATIONS

BAIAP3 (E-14) is recommended for detection of BAIAP3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 BAIAP2L1 or BAIAP2L2.

BAIAP3 (E-14) is also recommended for detection of BAIAP3 in additional species, including equine and canine.

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 donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotting A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) 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<sup>™</sup> Mounting Medium: sc-24941.

### RESEARCH USE

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

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.