

BCAS3 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP2738a

Specification

BCAS3 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

<u>Q9H6U6</u>

BCAS3 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 54828

Other Names

Breast carcinoma-amplified sequence 3 {ECO:0000312|HGNC:HGNC:14347, ECO:0000312|MIM:607470}, GAOB1, BCAS3 {ECO:0000312|HGNC:HGNC:14347, ECO:0000312|MIM:607470}

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP2738a was selected from the N-term region of human BCAS3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

BCAS3 Antibody (N-term) Blocking Peptide - Protein Information

Name BCAS3 {ECO:0000312|HGNC:HGNC:14347, ECO:0000312|MIM:607470}

Function

Plays a role in angiogenesis. Participates in the regulation of cell polarity and directional endothelial cell migration by mediating both the activation and recruitment of CDC42 and the reorganization of the actin cytoskeleton at the cell leading edge. Promotes filipodia formation (By similarity). Functions synergistically with PELP1 as a transcriptional coactivator of estrogen receptor- responsive genes. Stimulates histone acetyltransferase activity. Binds to chromatin. Plays a regulatory role in autophagic activity. In complex with PHAF1, associates with the preautophagosomal structure during both non-selective and selective autophagy (PubMed:33499712). Probably binds phosphatidylinositol 3-phosphate (PtdIns3P) which would mediate the recruitment preautophagosomal structures (PubMed:<a href="http://www.uniprot.org/citations/33499712"



target="_blank">33499712).

Cellular Location

Nucleus. Cytoplasm. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q8CCN5}. Preautophagosomal structure. Note=Localizes in the cytoplasm in stationary cells. Translocates from the cytoplasm to the leading edge in motile cells. Colocalizes with microtubules and intermediate filaments in both stationary and motile cells (By similarity) Associates with chromatin. Recruited to estrogen receptor-induced promoters in a PELP1-dependent manner. The BCAS3:PHAF1 complex is recruited to the preautophagosomal structures adjacent to the damaged mitochondria upon mitophagy in a PRKN-PINK1 dependent manner (PubMed:33499712). {ECO:0000250|UniProtKB:Q8CCN5, ECO:0000269|PubMed:17505058, ECO:0000269|PubMed:33499712}

Tissue Location

Expressed in stomach, liver, lung, kidney, prostate, testis, thyroid gland, adrenal gland, brain, heart, skeletal muscle, colon, spleen, small intestine, placenta, blood leukocyte and mammary epithelial cells. Expressed in undifferentiated ES cells Expressed in blood islands and nascent blood vessels derived from differentiated ES cells into embryoid bodies (BD). Expressed in endothelial cells. Not detected in brain. Expressed in brain tumors (at protein level). Expressed in brain. Highly expressed in breast cancers and in glioma cell lines.

BCAS3 Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

<u>Blocking Peptides</u>

BCAS3 Antibody (N-term) Blocking Peptide - Images

BCAS3 Antibody (N-term) Blocking Peptide - Background

Breast cancer amplified sequence 3 (BCAS3) was identified as a gene overexpressed and amplified in breast cancer cell lines. BCAS3 expression has been shown to be regulated by estrogen receptor alpha (ER alpha) and its coregulator PELP1 (proline-, glutamic acid-, and leucine-rich protein 1). BCAS3 has also been demonstrated to act as a coactivator of ER alpha activity in breast cancer cells and associate with the histone acetyltransferase complex protein P/CAF (p300/CBP-associated factor).

BCAS3 Antibody (N-term) Blocking Peptide - References

Baerlund M., Genes Chromosomes Cancer 35:311-317(2002). Strausberg, R.L., Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)