

Goat Anti-BCAP31 / BAP31 Antibody

Peptide-affinity purified goat antibody Catalog # AF1144a

Specification

Goat Anti-BCAP31 / BAP31 Antibody - Product Information

Application WB
Primary Accession P51572

Other Accession <u>NP_001132913</u>, <u>10134</u>

Reactivity
Predicted
Pig, Dog
Host
Clonality
Polyclonal
Concentration
Pig, Dog
Goat
100ug/200ul

Isotype IgG
Calculated MW 27992

Goat Anti-BCAP31 / BAP31 Antibody - Additional Information

Gene ID 10134

Other Names

B-cell receptor-associated protein 31, BCR-associated protein 31, Bap31, 6C6-AG tumor-associated antigen, Protein CDM, p28, BCAP31, BAP31, DXS1357E

Format

0.5~mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-BCAP31 / BAP31 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-BCAP31 / BAP31 Antibody - Protein Information

Name BCAP31 (HGNC:16695)

Function

Functions as a chaperone protein (PubMed:18287538, PubMed:9396746). Is one of the most abundant endoplasmic reticulum (ER) proteins (PubMed:18287538, PubMed:9396746).



Plays a role in the export of secreted proteins in the ER, the recognition of abnormally folded protein and their targeting to the ER associated-degradation (ERAD) (PubMed:18287538, PubMed:9396746). Also serves as a cargo receptor for the export of transmembrane proteins (By similarity). Plays a role in the assembly of the mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I) by stimulating the translocation of NDUFS4 and NDUFB11 from the cytosol to the mitochondria via interaction with TOMM40 (PubMed:31206022). In response to ER stress, delocalizes from the ER-mitochondria contact sites and binds BCL2 (PubMed:31206022). May be involved in CASP8-mediated apoptosis (PubMed:10958671(a>).

Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein Endoplasmic reticulum-Golgi intermediate compartment membrane; Multi-pass membrane protein. Note=May shuttle between the ER and the intermediate compartment/cis-Golgi complex (PubMed:9396746). Associates with the mitochondria-associated endoplasmic reticulum membrane via interaction with TOMM40 (PubMed:31206022)

Tissue Location

Ubiquitous. Highly expressed in neurons and discrete endocrine cells.

Goat Anti-BCAP31 / BAP31 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-BCAP31 / BAP31 Antibody - Images



AF1144a (0.1 μ g/ml) staining of Human Breast lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



Goat Anti-BCAP31 / BAP31 Antibody - Background

This gene encodes a member of the B-cell receptor associated protein 31 superfamily. The encoded protein is a multi-pass transmembrane protein of the endoplasmic reticulum that is involved in the anterograde transport of membrane proteins from the endoplasmic reticulum to the Golgi and in the caspase 8-mediated apoptosis. Microdeletions in this gene are associated with the contiguous ABCD1/DXS1375E deletion syndrome. Two pseudogenes have been identified on chromosome 16. Alternatively spliced transcript variants encoding distinct isoforms have been described although the biological validity of some of the variants has not been determined.

Goat Anti-BCAP31 / BAP31 Antibody - References

Bap31 is a novel target of the human papillomavirus E5 protein. Regan JA, et al. J Virol, 2008 Oct. PMID 18684816.

BAP31 interacts with Sec61 translocons and promotes retrotranslocation of CFTRDeltaF508 via the derlin-1 complex. Wang B, et al. Cell, 2008 Jun 13. PMID 18555783.

Bap31 is an itinerant protein that moves between the peripheral endoplasmic reticulum (ER) and a juxtanuclear compartment related to ER-associated Degradation. Wakana Y, et al. Mol Biol Cell, 2008 May. PMID 18287538.

Toward a confocal subcellular atlas of the human proteome. Barbe L, et al. Mol Cell Proteomics, 2008 Mar. PMID 18029348.

Bap31 enhances the endoplasmic reticulum export and quality control of human class I MHC molecules. Ladasky JJ, et al. J Immunol, 2006 Nov 1. PMID 17056546.