

#### BCAP31 / BAP31 Antibody (clone CC-1)

Rat Monoclonal Antibody Catalog # ALS12142

#### **Specification**

#### BCAP31 / BAP31 Antibody (clone CC-1) - Product Information

Application IHC
Primary Accession P51572
Host Rat

Clonality Monoclonal Calculated MW 28kDa KDa

## BCAP31 / BAP31 Antibody (clone CC-1) - 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

### Target/Specificity

Recognizes an epitope (aa 230-246) encompassing a caspase recognition site and the ER-homing motif (KKEE), present at the C-terminus of human, primate, bovine and hamster BAP31. Does not recognize mouse and rat BAP31.

### **Reconstitution & Storage**

+4°C or -20°C, Avoid repeated freezing and thawing.

#### **Precautions**

BCAP31 / BAP31 Antibody (clone CC-1) is for research use only and not for use in diagnostic or therapeutic procedures.

#### BCAP31 / BAP31 Antibody (clone CC-1) - Protein Information

## Name BCAP31 (<u>HGNC:16695</u>)

## **Function**

Functions as a chaperone protein (PubMed: <a href="http://www.uniprot.org/citations/9396746" target="\_blank">9396746</a>, PubMed: <a href="http://www.uniprot.org/citations/18287538" target="\_blank">18287538</a>). Is one of the most abundant endoplasmic reticulum (ER) proteins (PubMed: <a href="http://www.uniprot.org/citations/9396746"

target="\_blank">9396746</a>, PubMed:<a href="http://www.uniprot.org/citations/18287538" target="\_blank">18287538</a>). 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:<a href="http://www.uniprot.org/citations/9396746"

target="\_blank">9396746</a>, PubMed:<a href="http://www.uniprot.org/citations/18287538" target="\_blank">18287538</a>). 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:<a href="http://www.uniprot.org/citations/31206022" target="\_blank">31206022</a>). In response to ER stress, delocalizes from the ER-mitochondria contact sites and binds BCL2 (PubMed:<a href="http://www.uniprot.org/citations/31206022" target="\_blank">31206022</a>). May be involved in CASP8-mediated apoptosis (PubMed:<a href="http://www.uniprot.org/citations/10958671" target=" blank">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**

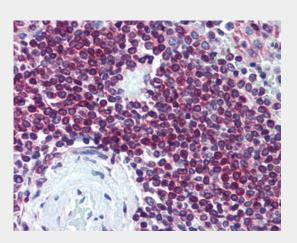
Ubiquitous. Highly expressed in neurons and discrete endocrine cells.

## BCAP31 / BAP31 Antibody (clone CC-1) - Protocols

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

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

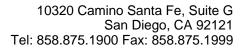
#### BCAP31 / BAP31 Antibody (clone CC-1) - Images



Anti-BCAP31 / BAP31 antibody IHC of human spleen.

## BCAP31 / BAP31 Antibody (clone CC-1) - Background

Functions as a chaperone protein. Is one of the most abundant endoplasmic reticulum (ER) proteins. 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). Also serves as a cargo receptor for the export of transmembrane proteins. May be involved in CASP8- mediated apoptosis.





# BCAP31 / BAP31 Antibody (clone CC-1) - References

Mosser J., et al. Genomics 22:469-471(1994). Li E., et al. Eur. J. Biochem. 238:631-638(1996). Adachi T., et al. EMBO J. 15:1534-1541(1996). Ota T., et al. Nat. Genet. 36:40-45(2004). Ross M.T., et al. Nature 434:325-337(2005).