10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

BAP31 Antibody

Catalog # ASC10381

Product Information

Application	WB, E, IHC-P
Primary Accession	P51572
Other Accession	NP_005736, 32171186
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	27992
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	BAP31 antibody can be used for the detection of BAP31 by Western blot at 0.5 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 2 g/mL.

Additional Information

Gene ID	10134
Other Names	BAP31 Antibody: CDM, DDCH, BAP31, 6C6-AG, DXS1357E, B-cell receptor-associated protein 31, 6C6-AG tumor-associated antigen, BCR-associated protein 31, B-cell receptor-associated protein 31
Target/Specificity	BCAP31;
Reconstitution & Storage	BAP31 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	BAP31 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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).
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.

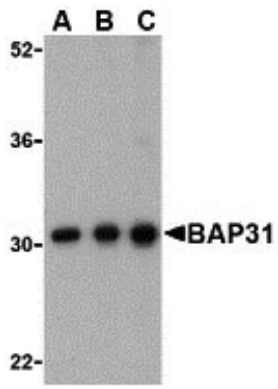
Background

BAP31 Antibody: Bap31 and the related protein Bap29 are endoplasmic reticulum (ER) and ER-vesicle membrane proteins and members of the B-cell receptor-associated protein family. These two proteins are highly homologous and can form homo- and heterodimers. Bap31 is thought to be involved in the intracellular trafficking of several molecules such as MHC Class I molecules and CD11b/CD18. It may also play a role in the initiation of ER stress-induced apoptosis through its association with caspase-8 via a death effector domain in its cytoplasmic tail, possibly through the promotion of membrane fragmentation and the release of cytochrome c from mitochondria. Bap31 itself contains two caspase cleavage sites and is cleaved during apoptosis. The p20 fragment of Bap31, when expressed ectopicially, is also a potent inducer cell death.

References

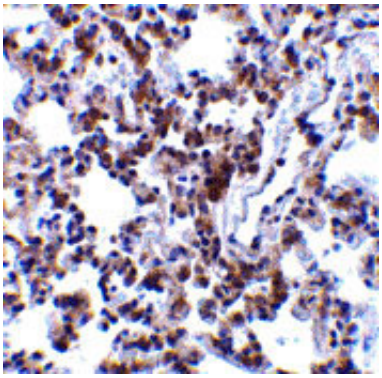
Ng F, Nguyen M, Kwan T, et al. p28 BAP31, a Bcl-2/Bcl-XL- and procaspase-8-associated proteinin the endoplasmic reticulum. J. Cell Biol.1997; 139:327-38.
Kim KM, Adachi T, Nielsen PJ, et al. Two new proteins preferentially associated with membrane immunoglobulin D. EMBO J.1994; 13:3793-800.
Paquet M-E, Cohen-Doyle M, Shore GC, et al. Bap29/31 influences the intracellular traffic of MHC class I molecules. J. Immunol.2004; 172:7548-55.
Zen K, Utech M, Liu Y, et al. Association of BAP31 with CD11b/CD18. Potential role in intracellular trafficking of CD11b/CD18 in neutrophils. J. Biol. Chem.2004; 279:44924-30.

Images



Western blot analysis of BAP31 in Ramos cell lysate with BAP31 antibody at (A) 0.5, (B) 1 and (C) 2 µg/mL.

Immunohistochemistry of BAP31 in rat lung tissue with BAP31 antibody at 2 µg/mL.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.