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Bag1 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52843

Product Information

Application	WB
Primary Accession	Q99933
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	38779

Additional Information

Gene ID	573
Other Names	Bag 1;BAG family molecular chaperone regulator 1;BAG-1;BAG1;BAG1_HUMAN;BCL 2 Associated Athanogene 1;BCL 2 associated athanogene;BCL 2 binding athanogene 1;Bcl-2-associated athanogene 1;BCL2 associated athanogene 1;BCL2 associated athanogene;Glucocorticoid receptor-associated protein RAP46;HAP1;Haptoglobin;RAP 46;RAP46.
Dilution	WB~~1:1000
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	BAG1
Synonyms	HAP
Function	Co-chaperone for HSP70 and HSC70 chaperone proteins. Acts as a nucleotide-exchange factor (NEF) promoting the release of ADP from the HSP70 and HSC70 proteins thereby triggering client/substrate protein release. Nucleotide release is mediated via its binding to the nucleotide-binding domain (NBD) of HSPA8/HSC70 where as the substrate release is mediated via its binding to the substrate-binding domain (SBD) of HSPA8/HSC70 (PubMed:24318877, PubMed:27474739, PubMed:9873016). Inhibits the pro-apoptotic function of PPP1R15A, and has anti-apoptotic activity (PubMed:12724406). Markedly increases the anti-cell death function of BCL2 induced by various stimuli (PubMed:9305631). Involved in the

	STUB1-mediated proteasomal degradation of ESR1 in response to age-related circulating estradiol (17-beta-estradiol/E2) decline, thereby promotes neuronal apoptosis in response to ischemic reperfusion injury (By similarity).
Cellular Location	[Isoform 1]: Nucleus. Cytoplasm. Note=Isoform 1 localizes predominantly to the nucleus [Isoform 4]: Cytoplasm. Nucleus. Note=Isoform 4 localizes predominantly to the cytoplasm. The cellular background in which it is expressed can influence whether it resides primarily in the cytoplasm or is also found in the nucleus. In the presence of BCL2, localizes to intracellular membranes (what appears to be the nuclear envelope and perinuclear membranes) as well as punctate cytosolic structures suggestive of mitochondria
Tissue Location	Isoform 4 is the most abundantly expressed isoform. It is ubiquitously expressed throughout most tissues, except the liver, colon, breast and uterine myometrium. Isoform 1 is expressed in the ovary and testis. Isoform 4 is expressed in several types of tumor cell lines, and at consistently high levels in leukemia and lymphoma cell lines. Isoform 1 is expressed in the prostate, breast and leukemia cell lines. Isoform 3 is the least abundant isoform in tumor cell lines (at protein level).

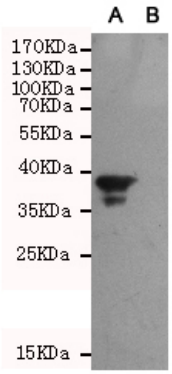
Background

Inhibits the chaperone activity of HSP70/HSC70 by promoting substrate release. Inhibits the pro-apoptotic function of PPP1R15A, and has anti-apoptotic activity. Markedly increases the anti-cell death function of BCL2 induced by various stimuli.

References

Zeiner M.,et al.Proc. Natl. Acad. Sci. U.S.A. 92:11465-11469(1995).
Takayama S.,et al.Genomics 35:494-498(1996).
Takayama S.,et al.Submitted (SEP-1997) to the EMBL/GenBank/DDBJ databases.
Wadle A.,et al.Int. J. Cancer 117:896-904(2005).
Suzuki Y.,et al.Submitted (APR-2005) to the EMBL/GenBank/DDBJ databases.

Images



Western blot analysis of extracts from CHO-K1 cells, transfected with a human pEGFP-C1-BAG1 construct (A) or transfected with a human pEGFP-C1 construct (B), using Bag1 mouse mAb (1:1000 diluted).

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