

BAG1 / BAG-1 Antibody (clone 2D3)
Mouse Monoclonal Antibody
Catalog # ALS14917**Specification**

BAG1 / BAG-1 Antibody (clone 2D3) - Product Information

Application	WB, IF
Primary Accession	Q99933
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Calculated MW	39kDa KDa

BAG1 / BAG-1 Antibody (clone 2D3) - Additional Information**Gene ID** 573**Other Names**

BAG family molecular chaperone regulator 1, BAG-1, Bcl-2-associated athanogene 1, BAG1, HAP

Target/Specificity

Human Bag1

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions

BAG1 / BAG-1 Antibody (clone 2D3) is for research use only and not for use in diagnostic or therapeutic procedures.

BAG1 / BAG-1 Antibody (clone 2D3) - 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:27474739, PubMed:9873016, PubMed:24318877). 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

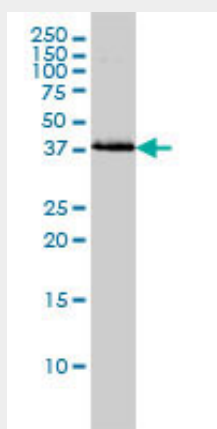
Isoform 4 is the most abundantly expressed isoform. It is ubiquitously expressed throughout most tissues, except the liver, colon, breast and uterine myometrium. Isoform 1 is expressed in the ovary and testis. Isoform 4 is expressed in several types of tumor cell lines, and at consistently high levels 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).

BAG1 / BAG-1 Antibody (clone 2D3) - Protocols

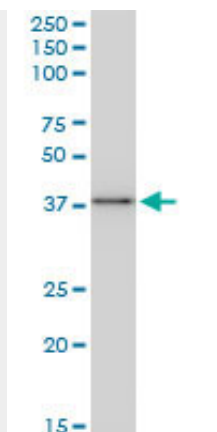
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

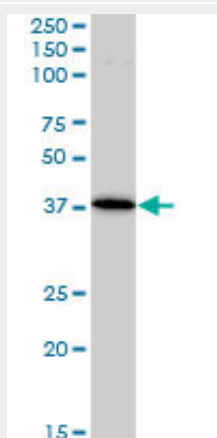
BAG1 / BAG-1 Antibody (clone 2D3) - Images



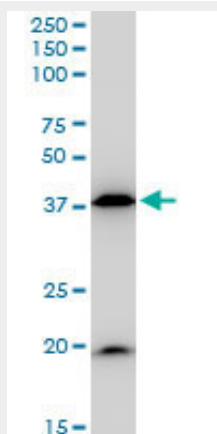
BAG1 monoclonal antibody (M02), clone 2D3 Western blot of BAG1 expression in HeLa.



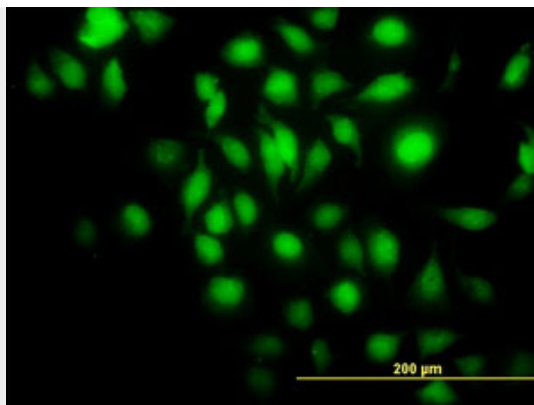
BAG1 monoclonal antibody (M02), clone 2D3. Western blot of BAG1 expression in Raw 264.7.



BAG1 monoclonal antibody (M02), clone 2D3. Western blot of BAG1 expression in Jurkat.



BAG1 monoclonal antibody (M02), clone 2D3. Western blot of BAG1 expression in NIH/3T3.



Immunofluorescence of monoclonal antibody to BAG1 on HeLa cell. [antibody concentration 35 ug/ml]

BAG1 / BAG-1 Antibody (clone 2D3) - 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.

BAG1 / BAG-1 Antibody (clone 2D3) - 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.