

Bag1 Antibody

Rabbit mAb Catalog # AP92820

Specification

Bag1 Antibody - Product Information

Application Primary Accession Reactivity Clonality Other Names BAG1; HAP1; RAP46;	WB, IHC, ICC <u>Q99933</u> Rat Monoclonal
lsotype Host Calculated MW	Rabbit IgG Rabbit 38779 Da
Bag1 Antibody - Additional Information	
Dilution	WB~~1:1000 IHC~~1:100~500 ICC~~N/A
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Bag1
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Bag1 Antibody - 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).

Bag1 Antibody - Protocols

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

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

Bag1 Antibody - Images





Western blot analysis of Bag1 expression in HeLa cell lysate.