

Anti-Bag1 Antibody

Catalog # ABO10716

Specification

Anti-Bag1 Antibody - Product Information

Application Primary Accession Host Reactivity Clonality Format Description WB, IHC <u>099933</u> Rabbit Human, Rat Polyclonal Lyophilized

Rabbit IgG polyclonal antibody for BAG family molecular chaperone regulator 1(BAG1) detection. Tested with WB, IHC-P, ICC in Human;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Bag1 Antibody - Additional Information

Gene ID 573

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

Calculated MW 38779 MW KDa

Application Details Immunocytochemistry , 0.5-1 μg/ml, Human, -
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, Rat, Mouse, By Heat
browestern blot, 0.1-0.5 μg/ml, Human
browestern blot, 0.1-0.5 μg/ml, Human
browestern blot, 0.1-0.5 μg/ml, Human
blot, 0.1-0.5 μg/ml, Human
blot, 0.1-0.5 μg/ml, Human
blot, 0.1-0.5 μg/ml, 0.1-0.5

Subcellular Localization Isoform 1: Nucleus. Cytoplasm. Isoform 1 localizes predominantly to the nucleus.

Tissue Specificity

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).

Protein Name BAG family molecular chaperone regulator 1(BAG-1)

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen



A synthetic peptide corresponding to a sequence at the C-terminus of human Bag1(322-344aa DTVEQNICQETERLQSTNFALAE), different from the related mouse sequence by two amino acids.

Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Contains 1 BAG domain.

Anti-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: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).



Anti-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>

Anti-Bag1 Antibody - Images



Anti-Bag1 antibody, ABO10716, Western blottingLane 1: Recombinant Human BAG-1 Protein 10ngLane 2: Recombinant Human BAG-1 Protein 5ngLane 3: Recombinant Human BAG-1 Protein 2.5ngLane 4: MCF-7 Cell Lysate



Anti-Bag1 antibody, ABO10716, IHC(P)IHC(P): Rat Intestine Tissue

Anti-Bag1 Antibody - Background

BAG family molecular chaperone regulator 1(BAG1) is a protein that in humans is encoded by the BAG1 gene. Human BAG1 is mapped to chromosome 9p12, a region associated with hereditary disorders that may involve developmental dysregulation of programmed cell death. The Bag1 protein is rich in glutamic acid residues. Its deduced 274-amino acid protein has a calculated molecular mass of 31 KD. Being the BCL-2-associated athanogene, Bag1 enhances the



anti-apoptotic effects of BCL2 and represents a link between growth factor receptors and anti-apoptotic mechanisms.