

KD-Validated Anti-BAG1 Rabbit Monoclonal Antibody Rabbit monoclonal antibody Catalog # AGI1156

Specification

KD-Validated Anti-BAG1 Rabbit Monoclonal Antibody - Product Information

Application	WB, FC, ICC
Primary Accession	<u>Q99933</u>
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 39 kDa , observed, 33, 46, 50
	kDa KDa
Gene Name	BAG1
Aliases	BAG1; BAG Cochaperone 1; BAG Family
	Molecular Chaperone Regulator 1; BCL2
	Associated Athanogene 1; BAG-1; HAP;
	Glucocortoid Receptor-Associated Protein
	RAP46; Bcl-2 Associating Athanogene-1
	Protein; Receptor-Associated Protein,
	46-K; Bcl-2-Associated Athanogene 1; BCL2
	Associated Athanogene; BCL2-Associated
	Athanogene; Bcl-2-Binding Protein; RAP46
Immunogen	A synthesized peptide derived from Bag1

KD-Validated Anti-BAG1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 573 Other Names BAG family molecular chaperone regulator 1, BAG-1, Bcl-2-associated athanogene 1, BAG1, HAP

KD-Validated Anti-BAG1 Rabbit Monoclonal 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).

KD-Validated Anti-BAG1 Rabbit Monoclonal 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
- <u>Immunoprecipitation</u>
- Flow Cytomety
- <u>Cell Culture</u>

KD-Validated Anti-BAG1 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-BAG1 antibody (Cat#AGI1156). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with



anti-BAG1 antibody (Cat#AGI1156, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-BAG1 antibody (Cat#AGI1156). BAG1 expression in wild type (WT) and BAG1 shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-BAG1 antibody (Cat#AGI1156, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of BAG1 expression in C2C12 cells using BAG1 antibody (Cat#AGI1156, 1:2,000). Green, isotype control; red, BAG1.



Immunocytochemical staining of C2C12 cells BAG1 antibody (Cat#AGI1156, 1:1,000). Nuclei were stained blue with DAPI; BAG1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 μ m.