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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	Q99933
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

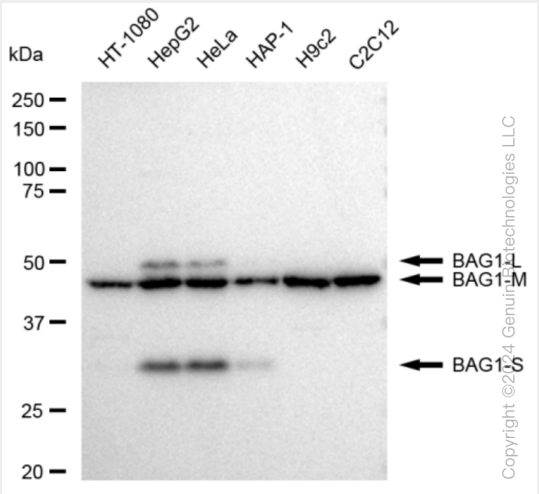
Tissue Location
Isoform 4 is the most abundantly expressed isoform. It is ubiquitously expressed throughout most tissues, except the liver, colon, breast and uterine myometrium. Isoform 1 is expressed in the ovary and testis. Isoform 4 is expressed in several types of tumor cell lines, and at consistently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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-BAG1 Rabbit Monoclonal Antibody - Images



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

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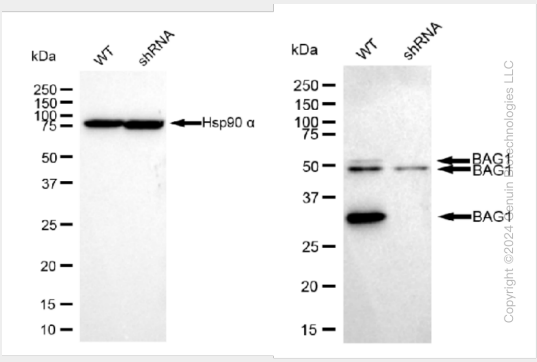
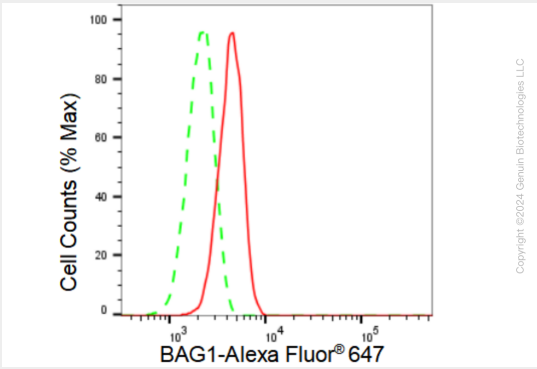
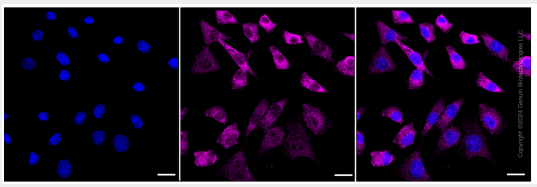
anti-BAG1 antibody (Cat#AGI1156, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-BAG1 antibody (Cat#AGI1156). BAG1 expression in wild type (WT) and BAG1 shRNA knockdown (KD) HeLa cells with 30 µg 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 µm.