

# **Bag-1 Polyclonal Antibody**

Catalog # AP73543

#### **Product Information**

**Application WB** 099933 **Primary Accession** Reactivity Human Host Rabbit Clonality **Polyclonal** Calculated MW 38779

#### **Additional Information**

Gene ID 573

**Other Names** BAG1; HAP; BAG family molecular chaperone regulator 1; BAG-1;

Bcl-2-associated athanogene 1

**Dilution** WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other

applications.

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium **Format** 

azide.

**Storage Conditions** -20°C

#### **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:<u>24318877</u>, PubMed:<u>27474739</u>, PubMed:<u>9873016</u>). 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

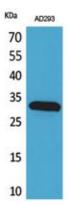
#### **Tissue Location**

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).

## **Background**

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).

### **Images**



Western Blot analysis of AD293 cells using Bag-1 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000

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