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BAG1

Purified Mouse Monoclonal Antibody
Catalog # AO2728a

Product Information

Application	WB, IHC, ICC, E
Primary Accession	Q99933
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	1E4B5
Isotype	Mouse IgG1
Calculated MW	38779
Immunogen	Purified recombinant fragment of human BAG1 (AA: 219-346) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	573
Other Names	HAP; BAG-1; RAP46
Dilution	WB~~ 1/500 - 1/2000 IHC~~1:100~500 ICC~~ 1/100 - 1/500 E~~ 1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	BAG1 is for research use only and not for use in diagnostic or therapeutic procedures.

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).

References

1.Oncol Rep. 2014 Oct;32(4):1441-6.2.Cell Physiol Biochem. 2014;33(2):365-74.

Images

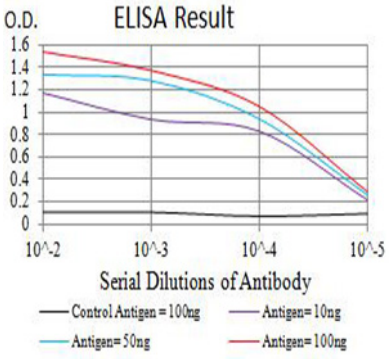


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

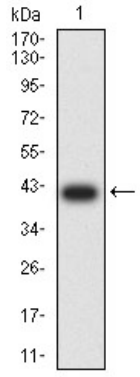


Figure 2:Western blot analysis using BAG1 mAb against human BAG1 (AA: 219-346) recombinant protein. (Expected MW is 40.6 kDa)

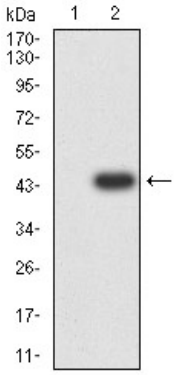


Figure 3:Western blot analysis using BAG1 mAb against HEK293 (1) and BAG1 (AA: 219-346)-hIgGFc transfected HEK293 (2) cell lysate.

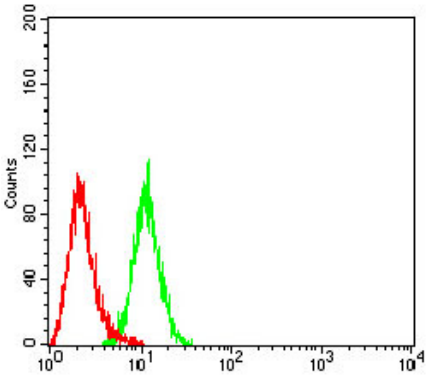


Figure 5:Flow cytometric analysis of Hela cells using BAG1 mouse mAb (green) and negative control (red).

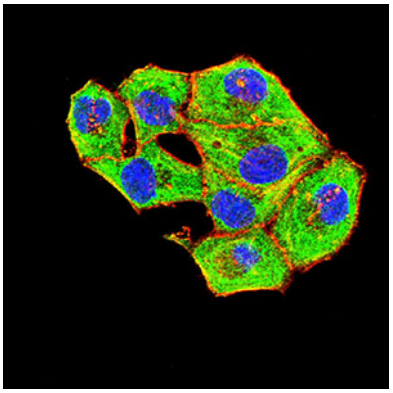


Figure 4:Immunofluorescence analysis of Hela cells using BAG1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.