

BAT3 antibody - C-terminal region

Rabbit Polyclonal Antibody Catalog # AI14701

Product Information

Application	WB
Primary Accession	<u>P46379</u>
Other Accession	<u>NM_004639</u> , <u>NP_004630</u>
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	119409

Additional Information

Gene ID	7917
Alias Symbol Other Names	BAG-6, BAG6, D6S52E, G3, BAT3 Large proline-rich protein BAG6, BAG family molecular chaperone regulator 6, BCL2-associated athanogene 6, BAG-6, BAG6, HLA-B-associated transcript 3, Protein G3, Protein Scythe, BAG6, BAT3, G3
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-BAT3 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	BAT3 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	BAG6 (<u>HGNC:13919</u>)
Function	ATP-independent molecular chaperone preventing the aggregation of misfolded and hydrophobic patches-containing proteins (PubMed: <u>21636303</u>). Functions as part of a cytosolic protein quality control complex, the BAG6/BAT3 complex, which maintains these client proteins in a soluble state and participates in their proper delivery to the endoplasmic reticulum or alternatively can promote their sorting to the proteasome where they undergo degradation (PubMed: <u>20516149</u> , PubMed: <u>21636303</u> , PubMed: <u>21743475</u> , PubMed: <u>28104892</u>). The BAG6/BAT3 complex is involved in the post-translational delivery of tail- anchored/type II transmembrane

	proteins to the endoplasmic reticulum membrane. Recruited to ribosomes, it interacts with the transmembrane region of newly synthesized tail-anchored proteins and together with SGTA and ASNA1 mediates their delivery to the endoplasmic reticulum (PubMed:20516149, PubMed:20676083, PubMed:25535373, PubMed:28104892). Client proteins that cannot be properly delivered to the endoplasmic reticulum are ubiquitinated by RNF126, an E3 ubiquitin-protein ligase associated with BAG6 and are sorted to the proteasome (PubMed:24981174, PubMed:27193484, PubMed:28104892). SGTA which prevents the recruitment of RNF126 to BAG6 may negatively regulate the ubiquitination and the proteasomal degradation of client proteins (PubMed:23129660, PubMed:25179605, PubMed:27193484). Similarly, the BAG6/BAT3 complex also functions as a sorting platform for proteins of the secretory pathway that are mislocalized to the endoplasmic reticulum (PubMed:21743475). The BAG6/BAT3 complex also plays a role in the endoplasmic reticulum-associated degradation (ERAD), a quality control mechanism that eliminates unwanted proteins of the endoplasmic reticulum through their retrotranslocation to the cytosol and their targeting to the proteasome (PubMed:21636303). BAG6 is also required for selective ubiquitin-mediated degradation of defective nascent chain polypetides by the proteasome. In this context, it may participate in the production of antigenic petides and play a role in antigen presentation in immune response (By similarity). BAG6 is also involved in endoplasmic reticulum stress-induced pre- emptive quality control, a mechanism that selectively attenuates the translocation of HSPA2 it may also play a role in the assembly of the synaptonemal complex during spermatogenesis (By similarity). Also positively regulates apoptosis by interacting with and thereoten optime a
	stabilizing the proapoptotic factor AIFM1 (By similarity). By controlling the steady-state expression of the IGF1R receptor, indirectly regulates the insulin-like growth factor receptor signaling pathway (PubMed: <u>26692333</u>).
Cellular Location	Cytoplasm, cytosol. Nucleus. Secreted, extracellular exosome Note=Normally localized in cytosol and nucleus, it can also be released extracellularly, in exosomes, by tumor and myeloid dendritic cells (PubMed:18055229, PubMed:18852879). Cytoplasmic retention is due to interaction with GET4 (PubMed:29042515).
Tissue Location	Expressed by immature dendritic cells (at protein level).

References

Banerji J.,et al.Proc. Natl. Acad. Sci. U.S.A. 87:2374-2378(1990). Bechtel S.,et al.BMC Genomics 8:399-399(2007). Ota T.,et al.Nat. Genet. 36:40-45(2004). Xie T.,et al.Genome Res. 13:2621-2636(2003). Hirakawa M.,et al.Submitted (DEC-2004) to the EMBL/GenBank/DDBJ databases.

Images

168 kDa_____ 144 kDa_____ 90 kDa____ 65 kDa____ 40 kDa____

WB Suggested Anti-BAT3 Antibody Titration: 1.0 µg/ml Positive Control: 293T Whole CellBAG6 is strongly supported by BioGPS gene expression data to be expressed in Human HEK293T cells

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