

**BAT3 / BAG6 Antibody (internal region)**  
Peptide-affinity purified goat antibody  
Catalog # AF2874a**Specification****BAT3 / BAG6 Antibody (internal region) - Product Information**

Application	IHC
Primary Accession	<a href="#">P46379</a>
Other Accession	<a href="#">NP_004630.3</a> , <a href="#">NP_542433.1</a> , <a href="#">7917</a> , <a href="#">224727</a> (mouse), <a href="#">94342</a> (rat)
Reactivity	Human
Predicted	Mouse, Rat, Pig, Dog
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	119409

**BAT3 / BAG6 Antibody (internal region) - Additional Information****Gene ID** 7917**Other Names**

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**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

**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**

BAT3 / BAG6 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

**BAT3 / BAG6 Antibody (internal region) - Protein Information****Name** BAG6 ([HGNC:13919](#))**Function**

ATP-independent molecular chaperone preventing the aggregation of misfolded and hydrophobic patches-containing proteins (PubMed:<a href="http://www.uniprot.org/citations/21636303" target="\_blank">21636303</a>). 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:<a href="http://www.uniprot.org/citations/20516149" target="\_blank">20516149</a>, PubMed:<a href="http://www.uniprot.org/citations/21636303" target="\_blank">21636303</a>, PubMed:<a href="http://www.uniprot.org/citations/21743475" target="\_blank">21743475</a>, PubMed:<a href="http://www.uniprot.org/citations/28104892" target="\_blank">28104892</a>). 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:<a href="http://www.uniprot.org/citations/20516149" target="\_blank">20516149</a>, PubMed:<a href="http://www.uniprot.org/citations/20676083" target="\_blank">20676083</a>, PubMed:<a href="http://www.uniprot.org/citations/25535373" target="\_blank">25535373</a>, PubMed:<a href="http://www.uniprot.org/citations/28104892" target="\_blank">28104892</a>). 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:<a href="http://www.uniprot.org/citations/24981174" target="\_blank">24981174</a>, PubMed:<a href="http://www.uniprot.org/citations/27193484" target="\_blank">27193484</a>, PubMed:<a href="http://www.uniprot.org/citations/28104892" target="\_blank">28104892</a>). SGTA which prevents the recruitment of RNF126 to BAG6 may negatively regulate the ubiquitination and the proteasomal degradation of client proteins (PubMed:<a href="http://www.uniprot.org/citations/23129660" target="\_blank">23129660</a>, PubMed:<a href="http://www.uniprot.org/citations/25179605" target="\_blank">25179605</a>, PubMed:<a href="http://www.uniprot.org/citations/27193484" target="\_blank">27193484</a>). Similarly, the BAG6/BAT3 complex also functions as a sorting platform for proteins of the secretory pathway that are mislocalized to the cytosol either delivering them to the proteasome for degradation or to the endoplasmic reticulum (PubMed:<a href="http://www.uniprot.org/citations/21743475" target="\_blank">21743475</a>). 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. It maintains these retrotranslocated proteins in an unfolded yet soluble state condition in the cytosol to ensure their proper delivery to the proteasome (PubMed:<a href="http://www.uniprot.org/citations/21636303" target="\_blank">21636303</a>). BAG6 is also required for selective ubiquitin-mediated degradation of defective nascent chain polypeptides by the proteasome. In this context, it may participate in the production of antigenic peptides 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 newly synthesized proteins into the endoplasmic reticulum and reroutes them to the cytosol for proteasomal degradation. BAG6 may ensure the proper degradation of these proteins and thereby protects the endoplasmic reticulum from protein overload upon stress (PubMed:<a href="http://www.uniprot.org/citations/26565908" target="\_blank">26565908</a>). By inhibiting the polyubiquitination and subsequent proteasomal degradation 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 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:<a href="http://www.uniprot.org/citations/26692333" target="\_blank">26692333</a>).

### 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

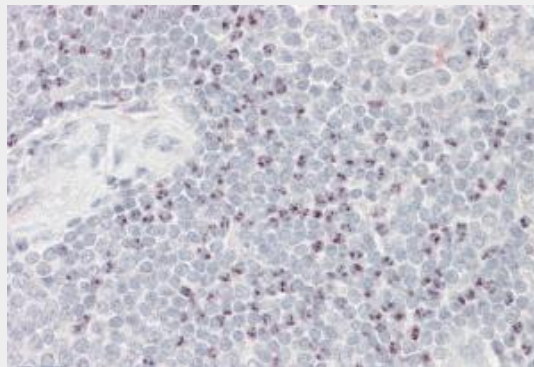
Expressed by immature dendritic cells (at protein level).

### **BAT3 / BAG6 Antibody (internal region) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **BAT3 / BAG6 Antibody (internal region) - Images**



AF2874a (3.8 µg/ml) staining of paraffin embedded Human Spleen. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

### **BAT3 / BAG6 Antibody (internal region) - Background**

This antibody is expected to recognize both reported isoforms (NP\_004630.3; NP\_542433.1). Reported variants representing identical protein: NP\_542434.1, NP\_001092004.1, NP\_542433.1 (isoform b).

### **BAT3 / BAG6 Antibody (internal region) - References**

BAG-4/SODD and associated antiapoptotic proteins are linked to aggressiveness of epithelial ovarian cancer. Annunziata CM, Kleinberg L, Davidson B, Berner A, Gius D, Tchabo N, Steinberg SM, Kohn EC. Clin Cancer Res. 2007 Nov 15;13(22 Pt 1):6585-92. PMID: 18006758