

### **Product datasheet for TA363271**

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## **Bag6 Rabbit Polyclonal Antibody**

### **Product data:**

**Product Type:** Primary Antibodies

Applications: WB

Reactivity: Mouse Host: Rabbit

Clonality: Polyclonal

**Immunogen:** The immunogen is a synthetic peptide directed towards the middle region of mouse BAG6

**Specificity: Expected reactivity**: Mouse

Formulation: Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2%

sucrose.

Note that this product is shipped as lyophilized powder to China customers.

**Concentration:** lot specific

Purification: Affinity purified Conjugation: Unconjugated

Storage: For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small

aliquots to prevent freeze-thaw cycles.

**Stability:** Shelf life: one year from despatch.

**Predicted Protein Size:** 121 kDa

**Gene Name:** BCL2-associated athanogene 6

Database Link: NP 476512.1

Entrez Gene 224727 Mouse

Q9Z1R2



Background:

ATP-independent molecular chaperone preventing the aggregation of misfolded and hydrophobic patches-containing proteins. 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 to their proper delivery to the endoplasmic reticulum or alternatively can promote their sorting to the proteasome where they undergo degradation. 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. 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. SGTA which prevents the recruitment of RNF126 to BAG6 may negatively regulate the ubiquitination and the proteasomal degradation of client proteins. 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. 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 (By similarity). BAG6 is also required for selective ubiquitinmediated degradation of defective nascent chain polypeptides by the proteasome. In this context, it may participate to the production of antigenic peptides and play a role in antigen presentation in immune response. BAG6 is also involved in endoplasmic reticulum stressinduced 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 (By similarity). 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. Also positively regulates apoptosis by interacting with and stabilizing the proapoptotic factor AIFM1. By controlling the steady-state expression of the IGF1R receptor, indirectly regulates the insulin-like growth factor receptor signaling pathway (By similarity).

Synonyms: BAG-6; BAT3; D6S52E; G3



# **Product images:**



Host: Rabbit

Target Name: BAG6

Sample Tissue: Mouse Skeletal Muscle lysates

Antibody Dilution: 1ug/ml