

## PRODUCT DATA SHEET

Bioworld Technology,Inc.

# **BAG6** Rabbit monoclonal antibody

Catalog: MB66320 Host: Rabbit Reactivity: Human, Mouse, Rat

#### **BackGround:**

BAG6 (BCL2-associated athanogene-6), alternately known as BAT3 (HLA-B-associated transcript 3), was originally identified as a gene within the class III region of the human major histocompatibility complex, but has subsequently been found to exhibit protein chaperone activity. BAG6, in conjunction with other chaperone proteins and ubiquitin ligases, regulates protein stability and insertion of tail-anchored membrane proteins into the endoplasmic reticulum. The BAT3 complex, consisting of BAG6, TRC35 and Ubl4a localizes to ribosomes synthesizing membrane proteins and facilitates tailed-anchored protein capture by TRC40 and subsequent insertion of the nascent protein in to the ER membrane. BAG6 also plays a critical role in clearing cells of mis-folded and mis-localized peptides via endoplasmic reticulum-associated degradation and the ubiquitin-proteasome system. BAG6 may also act as a chaperone for glycoproteins through its interaction with DERLIN2.

In addition to its role as a chaperone, BAG6 has also been implicated in regulating chromatin structure and gene expression. For example, BAG6 and SET1A act as binding partners for BORIS to effect changes of chromatin structure and gene expression. Similarly, increased expression of BAG6 induces p300-mediated acetylation of p53, which is required for DNA damage response. BAG6 has also been found to interact with TGF-β, and in so doing acts as a positive regulator of TGF-β1 stimulation of type 1 collagen expression. BAG6 also suppresses bone morphogenic protein (BMP) signaling via its interaction with and regulation of small C-terminal domain phosphatase (SCP) that dephosphorylates SMAD proteins resulting in subsequent termination of BMP-mediated events.

#### **Product:**

Liquid in 50mM Tris-Glycine (pH 7.4), 0.15M NaCl, 50% Glycerol, 0.01% Sodium azide and 0.05% BSA.

## **Molecular Weight:**

~ 150 kDa

## **Swiss-Prot:**

P46379

## **Purification&Purity:**

The antibody was purified by immunogen affinity chromatography.

## **Applications:**

WB (1/500 - 1/1000), IF/ICC (1/50 - 1/100)

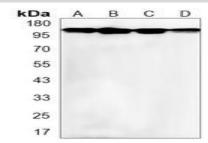
## **Storage&Stability:**

Store at  $4\,\mathrm{C}$  short term. Aliquot and store at -20  $\mathrm{C}$  long term. Avoid freeze-thaw cycles.

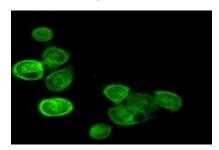
## **Specificity:**

Recognizes endogenous levels of BAG6 protein.

#### **DATA:**



Western blot analysis of BAG6 expression in K562 (A), rat brain (B), C6 (C), NIH3T3 (D) whole cell lysates.



Immunofluorescent analysis of BAG6 staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells

## Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park,

MN 55416,USA.

Email: <u>info@bioworlde.com</u>

Tel: 6123263284 Fax: 6122933841

## Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046,

P. R. China.

Email: <u>info@biogot.com</u>
Tel: 0086-025-68037686
Fax: 0086-025-68035151



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were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark.

**Note:** 

For research use only, not for use in diagnostic procedure.

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Email: <a href="mailto:info@biogot.com">info@biogot.com</a>
Tel: 0086-025-68037686
Fax: 0086-025-68035151