

## **GAAP Antibody**

Rabbit Polyclonal Antibody Catalog # ABV10383

# **Specification**

## **GAAP Antibody - Product Information**

Application WB
Primary Accession P55061

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 26538

# **GAAP Antibody - Additional Information**

**Gene ID** 7009

Positive Control Western blot: Jurkat cell lysate, 3T3 cell

lysate

Application & Usage Western blot: 1:200

**Other Names** 

Golgi anti-apoptotic protein, Protein S1R, Transmembrane BAX inhibitor motif-containing protein 4,

Z-protein

Target/Specificity

**GAAP** 

**Antibody Form** 

Liquid

**Appearance** 

Colorless liquid

**Formulation** 

100 μg (0.5 mg/ml) of antibody in PBS, 0.01 % BSA, 0.01 % thimerosal, and 50 % glycerol, pH 7.2

**Handling** 

The antibody solution should be gently mixed before use.

**Reconstitution & Storage** 

-20 °C

**Background Descriptions** 

### **Precautions**

GAAP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



GAAP Antibody - Protein Information

Name TMBIM6

Synonyms BI1, TEGT

#### **Function**

Endoplasmic reticulum (ER)-resident protein that confers cellular protection as an anti-apoptotic protein by limiting multiple stress-inducing pathways surrounding the endoplasmic reticulum and mitochondria (PubMed:<a href="http://www.uniprot.org/citations/21075086" target="\_blank">21075086</a>, PubMed:<a href="http://www.uniprot.org/citations/21068390" target="\_blank">21068390</a>). Inhibits the activities of the key sensor for the endoplasmic reticulum unfolded protein response IRE1alpha/ERN1 both directly and by blocking BAX/BAK binding (PubMed:<a href="http://www.uniprot.org/citations/19328063" target="\_blank">19328063</a>(a>). Modulates ER calcium homeostasis by acting as a calcium-leak channel (PubMed:<a href="http://www.uniprot.org/citations/22128171" target="\_blank">22128171</a>(a>). Negatively regulates autophagy and autophagosome formation, especially during periods of nutrient deprivation, and reduces cell survival during starvation (By similarity).

### **Cellular Location**

Endoplasmic reticulum membrane; Multi-pass membrane protein

**Tissue Location** 

Highly abundant in testis.

### **GAAP Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## **GAAP Antibody - Images**

# **GAAP Antibody - Background**

The BI-1 (Bax inhibitor 1) family is evolutionarily conserved as integral membrane proteins containing multiple membrane-spanning domains that are predominantly localized to intracellular membranes. BI-1 family members share multiple motifs and transcriptional factors within the promoter and the coding regions. They represent regulators of cell death pathways and are highly conserved in evolution from plants to insects, amphibians, mammals and pox-viruses. GAAP (Golgi anti-apoptotic protein), also known as TMBIM4 (transmembrane Bax inhibitor motif containing 4), S1R, ZPRO or CGI-119, is a 238 amino acid multi-pass membrane protein that belongs to the BI-1 family. Ubiquitously expressed, GAAP inhibits apoptosis induced by intrinsic and extrinsic apoptotic stimuli.