

**GABARAP Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP1821a****Specification**

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**GABARAP Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [O95166](#)**GABARAP Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 11337**Other Names**

Gamma-aminobutyric acid receptor-associated protein, GABA(A) receptor-associated protein, MM46, GABARAP, FLC3B

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP1821a](/product/products/AP1821a) was selected from the N-term region of human Autophagy GABARAP. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**GABARAP Antibody (N-term) Blocking Peptide - Protein Information****Name** GABARAP ([HGNC:4067](#))**Synonyms** FLC3B**Function**

Ubiquitin-like modifier that plays a role in intracellular transport of GABA(A) receptors and its interaction with the cytoskeleton (PubMed: [9892355](http://www.uniprot.org/citations/9892355)). Involved in autophagy: while LC3s are involved in elongation of the phagophore membrane, the GABARAP/GATE-16 subfamily is essential for a later stage in autophagosome maturation (PubMed: [15169837](http://www.uniprot.org/citations/15169837), PubMed: [20562859](http://www.uniprot.org/citations/20562859), PubMed: [22948227](http://www.uniprot.org/citations/22948227)). Through its interaction with the reticulophagy receptor TEX264, participates in the remodeling of subdomains of the endoplasmic reticulum into autophagosomes

upon nutrient stress, which then fuse with lysosomes for endoplasmic reticulum turnover (PubMed:<a href="http://www.uniprot.org/citations/31006538" target="\_blank">31006538</a>). Also required for the local activation of the CUL3(KBTBD6/7) E3 ubiquitin ligase complex, regulating ubiquitination and degradation of TIAM1, a guanyl-nucleotide exchange factor (GEF) that activates RAC1 and downstream signal transduction (PubMed:<a href="http://www.uniprot.org/citations/25684205" target="\_blank">25684205</a>). Thereby, regulates different biological processes including the organization of the cytoskeleton, cell migration and proliferation (PubMed:<a href="http://www.uniprot.org/citations/25684205" target="\_blank">25684205</a>). Involved in apoptosis (PubMed:<a href="http://www.uniprot.org/citations/15977068" target="\_blank">15977068</a>).

#### **Cellular Location**

Cytoplasmic vesicle, autophagosome membrane. Endomembrane system {ECO:0000250|UniProtKB:P60517}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:P60517}. Golgi apparatus membrane {ECO:0000250|UniProtKB:P60517}. Cytoplasmic vesicle {ECO:0000250|UniProtKB:P60517}. Note=Largely associated with intracellular membrane structures including the Golgi apparatus and postsynaptic cisternae. Colocalizes with microtubules (By similarity) Localizes also to discrete punctae along the ciliary axoneme (By similarity). {ECO:0000250|UniProtKB:P60517, ECO:0000250|UniProtKB:Q9DCD6}

#### **Tissue Location**

Heart, brain, placenta, liver, skeletal muscle, kidney and pancreas.

### **GABARAP Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

### **GABARAP Antibody (N-term) Blocking Peptide - Images**

### **GABARAP Antibody (N-term) Blocking Peptide - Background**

Gamma-aminobutyric acid A receptors [GABA(A) receptors] are ligand-gated chloride channels that mediate inhibitory neurotransmission. GABARAP is GABA(A) receptor-associated protein, which is highly positively charged in its N-terminus and shares sequence similarity with light chain-3 of microtubule-associated proteins 1A and 1B. This protein clusters neurotransmitter receptors by mediating interaction with the cytoskeleton.

### **GABARAP Antibody (N-term) Blocking Peptide - References**

Nemos, C., et al., Brain Res. Mol. Brain Res. 119(2):216-219 (2003). Stangler, T., et al., J. Biol. Chem. 277(16):13363-13366 (2002). Knight, D., et al., J. Biol. Chem. 277(7):5556-5561 (2002). Tanida, I., et al., J. Biol. Chem. 277(16):13739-13744 (2002). Harris, R., et al., J. Biomol. NMR 21(2):185-186 (2001).