



**ATG4B Blocking Peptide (Center)** 

Synthetic peptide Catalog # BP20544c

## **Specification**

ATG4B Blocking Peptide (Center) - Product Information

Primary Accession Other Accession <u>Q9Y4P1</u> <u>Q8BGE6</u>, <u>Q6DG88</u>,

<u>Q6PZ02</u>, <u>Q6PZ03</u>

ATG4B Blocking Peptide (Center) - Additional Information

**Gene ID 23192** 

### **Other Names**

Cysteine protease ATG4B, 3422-, AUT-like 1 cysteine endopeptidase, Autophagin-1, Autophagy-related cysteine endopeptidase 1, Autophagy-related protein 4 homolog B, hAPG4B, ATG4B, APG4B, AUTL1, KIAA0943

## **Target/Specificity**

The synthetic peptide sequence is selected from aa 260-290 of Human ATG4B

### **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.

ATG4B Blocking Peptide (Center) - Protein Information

Name ATG4B

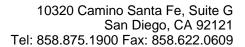
Synonyms APG4B, AUTL1, KIAA0943

# ATG4B Blocking Peptide (Center) - Background

Cysteine protease required for autophagy, which cleaves the C-terminal part of either MAP1LC3, GABARAPL2 or GABARAP, allowing the liberation of form I. A subpopulation of form I is subsequently converted to a smaller form (form II). Form II, with a revealed C-terminal glycine, is considered to be the phosphatidylethanolamine (PE)-conjugated form, and has the capacity for the binding to autophagosomes.

## ATG4B Blocking Peptide (Center) - References

Marino G., et al. J. Biol. Chem. 278:3671-3678(2003). Kabeya Y., et al. J. Cell Sci. 117:2805-2812(2004). Nagase T., et al. DNA Res. 6:63-70(1999). Ohara O., et al. Submitted (AUG-2005) to the EMBL/GenBank/DDBJ databases. Ota T., et al. Nat. Genet. 36:40-45(2004).





### Function

Cysteine protease required for the cytoplasm to vacuole transport (Cvt) and autophagy. Cleaves the C-terminal amino acid of ATG8 family proteins MAP1LC3, GABARAPL1, GABARAPL2 and GABARAP, to reveal a C-terminal glycine. Exposure of the glycine at the C-terminus is essential for ATG8 proteins conjugation to phosphatidylethanolamine (PE) and insertion to membranes, which is necessary for autophagy. Has also an activity of delipidating enzyme for the PE-conjugated forms.

Cellular Location Cytoplasm.

# ATG4B Blocking Peptide (Center) - Protocols

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

• Blocking Peptides