10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609

ATG4B Blocking Peptide (Center)

Synthetic peptide
Catalog # BP20544c

Specification

ATG4B Blocking Peptide (Center) - Product Information

Primary Accession	Q9Y4P1
Other Accession	Q8BGE6, Q6DG88, Q6PZ02, Q6PZ03

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