9051 Mira Mesa Blvd, #910094
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ATG4B Human

ATG4 Autophagy Related 4 Homolog B Human Recombinant
RCP0134

Product Overview

Name	ATG4B Human

Description

ATG4 Autophagy Related 4 Homolog B Human Recombinant

Accession (Primary)	Q9Y4P1

Synonyms

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

Introduction

Cysteine protease ATG4B (ATG4B) belongs to the autophagin protein family. Autophagy is the manner by which endogenous proteins and damaged organelles are destroyed intracellularly. Autophagy is vital for cell homeostasis and cell remodeling during differentiation, metamorphosis, non-apoptotic cell death, and aging. ATG4B is a cysteine protease necessary 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 then transformed to a smaller form (form II). Form II, with an exposed C-terminal glycine, is deemed to be the phosphatidylethanolamine (PE)-conjugated form, and is capable of binding to autophagosomes. Reduced levels of autophagy are seen in some malignant tumors; therefore autophagy may have a role in controlling the unregulated cell growth linked to cancer.

Source

Escherichia Coli.

Physical Appearance

Sterile Filtered clear solution.

Formulation

ATG4B protein solution (0.5mg/ml) containing 20mM Tris-HCl buffer (pH8.0), 20% glycerol, 1mM DTT and 0.1mM PMSF.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Purity

Greater than 90.0% as determined by SDS-PAGE.

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Amino acid sequence

MDAATLTYDT LRFAEFEDFP ETSEPVWILG RKYSIFTEKD EILSDVASRL WFTYRKNFPA IGGTGPTSDT GWGCMLRCGQ MIFAQALVCR HLGRDWRWTQ RKRQPDSYFS VLNAFIDRKD SYYSIHQIAQ MGVGEGKSIG QWYGPNTVAQ VLKKLAVFDT WSSLAVHIAM DNTVVMEEIR RLCRTSVPCA GATAFPADSD RHCNGFPAGA EVTNRPSPWR PLVLLIPLRL GLTDINEAYV ETLKHCFMMP QSLGVIGGKP NSAHYFIGYV GEELIYLDPH TTQPAVEPTD GCFIPDESFH CQHPPCRMSI AELDPSIAVG FFCKTEDDFN DWCQQVKKLS LLGGALPMFE LVEQQPSHLA CPDVLNLSLD SSDVERLERF FDSEDEDFEI LSL LEHHHHH H .

Precautions

ATG4B Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (Q9Y4P1)