



Catalog Number: PR27228

Product Type: Recombinant Protein

Source: *E. Coli*

Amino Acid Sequence: MDAATLTYDT LRFAEFEDFP ETSEPVWILG RKYSIFTEKD EILSDVASRL WFTYRKNFPA IGGTGPTSDT GWGCMLRCGQ MIFAQALVCR HLRDWRWTQ RKRQPDYSYFS VLNAFIDRKD SYYSIHQIAQ MGVGEGKSIG QWYGPNTVAQ VLKKLAVFDT WSSLAVHIAM DNTVVMEEIR RLCRTSVPCA GATAFPADSD RHCNGFPAGA EVTNRSPWR PLVLLIPLRL GLTDINEAYV ETLKHCFMMP QSLGVIGGKP NSAHYFIGYV GEELIYLDPH TTQPAVEPTD GCFIPDESFH CQHPPCRM SI AELDPSI AVG FFKTEDDFN DWCCQVKKLS LLGGALPMFE LVEQQPSHLA CPDVLNLSLD SSDVERLERF FDESEDFEI LSLLEHHHHH H

Description/Molecular Mass: 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, GABARAP2 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.

ATG4B Human Recombinant produced in *E. Coli* is a single, non-glycosylated polypeptide chain containing 401 amino acids (1-393 a.a.) and having a molecular mass of 45.4kDa.

ATG4B is fused to an 8 amino acid His-tag at C-terminus & purified by proprietary chromatographic techniques.

Purity: Greater than 90.0% as determined by:
(a) Analysis by SDS-PAGE.

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

Storage: 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.

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