Datasheet for ABIN7559073

ATG16L1 Protein (AA 1-607) (His tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	ATG16L1
Protein Characteristics:	AA 1-607
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ATG16L1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Atg16l1 Protein expressed in mammalian cells.
Sequence:	MSSGLRAADF PRWKRHIAEE LRRRDRLQRQ AFEEIILQYT KLLEKSDLHS VLTQKLQAEK HDMPNRHEIS PGHDGAWNDS QLQEMAQLRI KHQEELTELH KKRGELAQLV IDLNNQMQQK DKEIQMNEAK ISEYLQTISD LETNCLDLRT KLQDLEVANQ TLKDEYDALQ ITFTALEEKL RKTTEENQEL VTRWMAEKAQ EANRLNAENE KDSRRRQARL QKELAEAAKE PLPVEQDDDI EVIVDETSDH TEETSPVRAV SRAATKRLSQ PAGGLLDSIT NIFGRRSVSS IPVPQDIMDT HPASGKDVRV PTTASYVFDA HDGEVNAVQF SPGSRLLATG GMDRRVKLWE AFGDKCEFKG SLSGSNAGIT SIEFDSAGAY LLAASNDFAS RIWTVDDYRL RHTLTGHSGK VLSAKFLLDN ARIVSGSHDR TLKLWDLRSK VCIKTVFAGS SCNDIVCTEQ CVMSGHFDKK IRFWDIRSES VVREMELLGK ITALDLNPER TELLSCSRDD LLKVIDLRTN AVKQTFSAPG FKCGSDWTRV VFSPDGSYVA AGSAEGSLYV WSVLTGKVEK VLSKQHSSSI NAVAWAPSGL HVVSVDKGSR AVLWAQP **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag**

Product Details

	necessary. In case you have a special request, please contact us.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalian cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	ATG16L1
Alternative Name:	Atg16l1 (ATG16L1 Products)
Background:	Autophagy-related protein 16-1 (APG16-like 1),FUNCTION: Plays an essential role in both canonical and non-canonical autophagy: interacts with ATG12-ATG5 to mediate the lipidation to ATG8 family proteins (MAP1LC3A, MAP1LC3B, MAP1LC3C, GABARAPL1, GABARAPL2 and GABARAP) (PubMed:12665549, PubMed:18849966, PubMed:19898471, PubMed:23392225, PubMed:24553140, PubMed:24954904, PubMed:33586810). Acts as a molecular hub, coordinating autophagy pathways via distinct domains that support either canonical or non-canonical signaling (PubMed:33586810). During canonical autophagy, interacts with ATG12-ATG5 to mediate the conjugation of phosphatidylethanolamine (PE) to ATG8 proteins, to produce a membrane-bound activated form of ATG8 (By similarity). Thereby, controls the elongation of the nascent autophagosomal membrane (By similarity). Also involved in non-

Target Details

	canonical autophagy, a parallel pathway involving conjugation of ATG8 proteins to single membranes at endolysosomal compartments, probably by catalyzing conjugation of phosphatidylserine (PS) to ATG8 (By similarity). Non-canonical autophagy plays a key role in epithelial cells to limit lethal infection by influenza A (IAV) virus (PubMed:33586810). Regulates mitochondrial antiviral signaling (MAVS)-dependent type I interferon (IFN-I) production (By similarity). Negatively regulates NOD1- and NOD2-driven inflammatory cytokine response (PubMed:24238340). Instead, promotes an autophagy-dependent antibacterial pathway together with NOD1 or NOD2 (PubMed:19898471, PubMed:19966812, PubMed:24238340). Plays a role in regulating morphology and function of Paneth cell (By similarity). {ECO:0000250|UniProtKB:Q676U5, ECO:0000269|PubMed:12665549, ECO:0000269|PubMed:18849966, ECO:0000269|PubMed:19898471, ECO:0000269|PubMed:19966812, ECO:0000269|PubMed:23392225, ECO:0000269|PubMed:24238340, ECO:0000269|PubMed:24553140, ECO:0000269|PubMed:24954904, ECO:0000269|PubMed:33586810}.
Molecular Weight:	68.2 kDa
UniProt:	Q8C0J2
Pathways:	Autophagy

Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months