Datasheet for ABIN7552466

ATG5 Protein (AA 1-275) (His tag)

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Overview

Quantity:	1 mg
Target:	ATG5
Protein Characteristics:	AA 1-275
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ATG5 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat ATG5 Protein expressed in mammalien cells.
Sequence:	MTDDKDVLRD VWFGRIPTCF TLYQDEITER EAEPYYLLLP RVSYLTLVTD KVKKHFQKVM RQEDISEIWF EYEGTPLKWH YPIGLLFDLL ASSSALPWNI TVHFKSFPEK DLLHCPSKDA IEAHFMSCMK EADALKHKSQ VINEMQKKDH KQLWMGLQND RFDQFWAINR KLMEYPAEEN GFRYIPFRIY QTTTERPFIQ KLFRPVAADG QLHTLGDLLK EVCPSAIDPE DGEKKNQVMI HGIEPMLETP LQWLSEHLSY PDNFLHISII PQPTD **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 necessary. In case you have a special request, please contact us.**
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts.

Product Details

	• Protein expressed in mammalien 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, Western Blot
Grade:	custom-made

Target Details

Target:	ATG5
Alternative Name:	ATG5 (ATG5 Products)
Background:	Autophagy protein 5 (APG5-like) (Apoptosis-specific protein),FUNCTION: Involved in autophagic vesicle formation. Conjugation with ATG12, through a ubiquitin-like conjugating system involving ATG7 as an E1-like activating enzyme and ATG10 as an E2-like conjugating enzyme, is essential for its function. The ATG12-ATG5 conjugate acts as an E3-like enzyme which is required for lipidation of ATG8 family proteins and their association to the vesicle membranes. Involved in mitochondrial quality control after oxidative damage, and in subsequent cellular longevity. Plays a critical role in multiple aspects of lymphocyte development and is essential for both B and T lymphocyte survival and proliferation. Required for optimal processing and presentation of antigens for MHC II. Involved in the maintenance of axon morphology and membrane structures, as well as in normal adipocyte differentiation. Promotes primary ciliogenesis through removal of OFD1 from centriolar satellites and degradation of IFT20 via the autophagic pathway. {ECO:0000250|UniProtKB:Q99J83, ECO:0000269|PubMed:12207896, ECO:0000269|PubMed:20580051, ECO:0000269|PubMed:22170153, ECO:0000269|PubMed:26812546}., FUNCTION: May play an important role in the apoptotic process, possibly within the modified cytoskeleton. Its expression is a relatively late event in the

Target Details

	apoptotic process, occurring downstream of caspase activity. Plays a crucial role in IFN-gamma-induced autophagic cell death by interacting with FADD. {ECO:0000269|PubMed:15778222, ECO:0000269|PubMed:7796880}., FUNCTION: (Microbial infection) May act as a proviral factor. In association with ATG12, negatively regulates the innate antiviral immune response by impairing the type I IFN production pathway upon vesicular stomatitis virus (VSV) infection (PubMed:17709747). Required for the translation of incoming hepatitis C virus (HCV) RNA and, thereby, for initiation of HCV replication, but not required once infection is established (PubMed:19666601). {ECO:0000269|PubMed:17709747, ECO:0000269|PubMed:19666601}.
Molecular Weight:	32.4 kDa
UniProt:	Q9H1Y0
Pathways:	Activation of Innate immune Response, Production of Molecular Mediator of Immune Response , Autophagy

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. 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