

Datasheet for ABIN7564876  
**ATG5 Protein (AA 1-275) (His tag)**



[Go to Product page](#)

## Overview

|                               |   |
|-------------------------------|---|
| Quantity:                     | 1 mg  |
| Target:                       | ATG5  |
| Protein Characteristics:      | AA 1-275                                    |
| Origin:                       | Mouse                                       |
| Source:                       | HEK-293 Cells                               |
| Protein Type:                 | Recombinant                                 |
| Purification tag / Conjugate: | This ATG5 protein is labelled with His tag. |

## Product Details

|                  |  |
|------------------|--|
| Purpose:         | Custom-made recombinant Atg5 Protein expressed in mammalian cells.   |
| Sequence:        | MTDDKDVLRD VWFGRIPTCF TLYQDEITER EAEPYLLLP RVSYLTLVTD KVKKHFQKVM<br>RQEDVSEIWF EYEGTPLKWH YPIGLLFDLL ASSSALPWNI TVHFKSFPEK DLLHCPSKDA<br>VEAHFMSCMK EADALKHKSQ VINEMQKKDH KQLWMGLQND RFDQFWAINR KLMEYPPEEN<br>GFRYIPFRIY QTTTERPFIQ KLFRPVAADG QLHTLGDLLR EVCPSA VAPE DGEKRSQVMI<br>HGIEPMLETP LQWLSEHLSY PDNFLHISIV PQPTD <b>Sequence without tag. The proposed<br/>Purification-Tag is based on experiences with the expression system, a different complexity<br/>of the protein could make another tag necessary. In case you have a special request, please<br/>contact us.</b> |
| 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:  |

## Product Details

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- 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.

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| Purity: | > 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC) |
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| Grade: | custom-made |
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## Target Details

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| Target: | ATG5 |
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| Alternative Name: | Atg5 ( <a href="#">ATG5 Products</a> ) |
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|             |   |
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| Background: | <p>Autophagy protein 5 (APG5-like),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:0000269 PubMed:11266458, ECO:0000269 PubMed:12890687, ECO:0000269 PubMed:17190837, ECO:0000269 PubMed:17912025, ECO:0000269 PubMed:18188005, ECO:0000269 PubMed:19844159,</p> |
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## Target Details

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ECO:0000269|PubMed:20171125, ECO:0000269|PubMed:24089205, ECO:0000269|PubMed:24089209}., FUNCTION: May play an important role in the apoptotic process, possibly within the modified cytoskeleton. Its expression is a relatively late event in the apoptotic process, occurring downstream of caspase activity. Plays a crucial role in IFN-gamma-induced autophagic cell death by interacting with FADD (By similarity). {ECO:0000250|UniProtKB:Q9H1Y0}., 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. {ECO:0000269|PubMed:17709747}.

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Molecular Weight: 32.4 kDa

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UniProt: [Q99J83](#)

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Pathways: [Activation of Innate immune Response](#), [Production of Molecular Mediator of Immune Response](#), [Autophagy](#)

## Application Details

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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.

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Restrictions: For Research Use only

## Handling

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Format: Liquid

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Buffer: The buffer composition is at the discretion of the manufacturer.

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Handling Advice: Avoid repeated freeze-thaw cycles.

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Storage: -80 °C

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Storage Comment: Store at -80°C.

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Expiry Date: 12 months