

# Recombinant Human ATG3 protein ab152071

### Description

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<b>Product name</b>	Recombinant Human ATG3 protein
<b>Purity</b>	> 95 % SDS-PAGE. The purity of ab152071 is greater than 95%, as determined by SEC-HPLC and reducing SDS-PAGE. It is supplied as a 0.2 µM filtered solution.
<b>Endotoxin level</b>	< 1.000 Eu/µg
<b>Expression system</b>	Escherichia coli
<b>Accession</b>	<b><u>Q9NT62</u></b>
<b>Protein length</b>	Protein fragment
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Human
<b>Sequence</b>	MQNVINTVKGKALEVAEYLPVLKESKFKETGVITPEEFVA AGDHLVHHC PTWQWATGEELKVKAYLPTGKQFLVTKNVPCYKRCKQM EYSDELEAIIIE DDGDGGWVDTYHNTGITGITEAVKEITLENKDNIRLQDCSA LCEEEEEDED EGEAADMEEYEESGLLETDEATLDTRKIVEACKAKTDAG GEDAILQTRTY DLYITYDKYYQTPRLWLFYDEQRQPLTVEHMYEDISQDHV KKTVTIENH PHLPPPPMCSVHPCRHAEV/MKKIIEETVAEGGGELGVHMY L LIFLKFVQAVIPTIEYDYTR HFTM
<b>Predicted molecular weight</b>	33 kDa
<b>Amino acids</b>	1 to 314

### Specifications

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Our **Abpromise guarantee** covers the use of **ab152071** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>Applications</b>	SDS-PAGE HPLC
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**Form** Liquid

## Preparation and Storage

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**Stability and Storage** Shipped on Dry Ice. The lyophilized protein is stable for a few weeks at room temperature. Store at -20°C long term.

pH: 8  
Constituents: 99% Phosphate Buffer, 0.88% Sodium chloride

## General Info

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**Function** E2-like enzyme involved in autophagy and mitochondrial homeostasis. Catalyzes the conjugation of ATG8-like proteins (GABARAP, GABARAPL1, GABARAPL2 or MAP1LC3A) to phosphatidylethanolamine (PE). PE-conjugation to ATG8-like proteins is essential for autophagy. Preferred substrate is MAP1LC3A. Also acts as an autocatalytic E2-like enzyme, catalyzing the conjugation of ATG12 to itself, ATG12 conjugation to ATG3 playing a role in mitochondrial homeostasis but not in autophagy. ATG7 (E1-like enzyme) facilitates this reaction by forming an E1-E2 complex with ATG3.

**Tissue specificity** Widely expressed, with a highest expression in heart, skeletal muscle, kidney, liver and placenta.

**Sequence similarities** Belongs to the ATG3 family.

**Post-translational modifications** Conjugated to ATG12 at Lys-243. ATG12-conjugation plays a role in regulation of mitochondrial homeostasis and cell death, while it is not involved in PE-conjugation to ATG8-like proteins and autophagy.

**Cellular localization** Cytoplasm.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

## Our Abpromise to you: Quality guaranteed and expert technical support

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