

#### DESCRIPTION

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| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                                |
| <b>Specificity</b>                                                                                                                                                                                      | Detects endogenous human ATG10 in Western blots.                                     |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Sheep IgG                                                                 |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                            |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human ATG10<br>Met1-Thr190<br>Accession # Q9H0Y0 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 nm      |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                         |
| *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |                                                                                      |

#### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

#### BACKGROUND

ATG10 (autophagy-related protein 10; also APG10-like) is a ubiquitous 28 kDa member of the ATG10 family of proteins. It serves as an E2-like enzyme during the initial stages of autophagosome formation by catalyzing the transfer of ATG12 to ATG5. This ATG5:ATG12 heterodimer subsequently associates non-covalently with an ATG16 multimer to generate an autophagosome. Human ATG10 is 220 amino acids in length and contains an active site at Cys166 that forms a thiol ester bond with the C-terminal Gly of ATG12. There are multiple isoform variants. One shows a deletion of aa 37-72, a second contains an alternate start site at Met43 that is accompanied by a 39 aa substitution for aa 152-220, and a third shows a 53 aa substitution for aa 73-220. Over amino acids 1-190, human ATG10 shares 79% aa identity with mouse ATG10.

#### PRODUCT SPECIFIC NOTICES

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