

#### DESCRIPTION

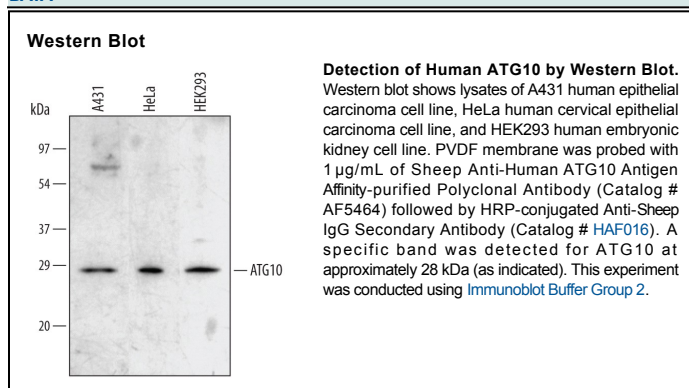
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects endogenous human ATG10 in Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human ATG10 Met1-Thr190 Accession # Q9H0Y0
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

#### 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	See Below

#### DATA



#### PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

#### 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.