

# **Human ATG10 Antibody**

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF5464

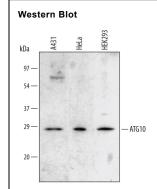
DESCRIPTION		
Species Reactivity	Human	
Specificity	Detects endogenous human ATG10 in Western blots.	
Source	Polyclonal Sheep IgG	
Purification	Antigen Affinity-purified	
Immunogen	E. coli-derived recombinant human ATG10 Met1-Thr190 Accession # Q9H0Y0	
Formulation	Lyophilized from a 0.2 µm filtered solution 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.

	Recommended Concentration	Sample
Western Blot	1 μg/mL	See Below

#### DATA



Detection of Human ATG10 by Western Blot. Western blot shows lysates of A431 human epithelial carcinoma cell line, HeLa human cervical epithelial carcinoma cell line, and HEK293 human embryonic kidney cell line. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human ATG10 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5464) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for ATG10 at approximately 28 kDa (as indicated). This experiment was conducted using Immunoblot Buffer Group 2.

# PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.		
Shipping	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		

## Stability & Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

## 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.

