

## DESCRIPTION

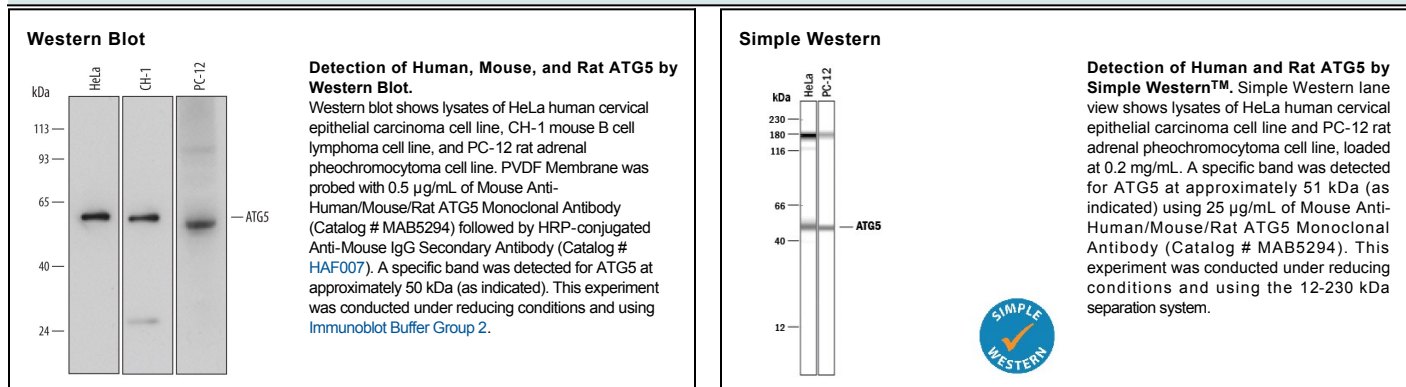
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human, mouse, and rat ATG5 in Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 603813
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human ATG5 Asn99-Thr193 Accession # Q9H1Y0
<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.

	Recommended Concentration	Sample
<b>Western Blot</b>	0.5 µg/mL	See Below
<b>Immunohistochemistry</b>	8-25 µg/mL	Immersion fixed paraffin-embedded human small intestine
<b>Simple Western</b>	25 µg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<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

ATG5 (Autophagy-related Protein), also known as APG5L and Apoptosis-specific Protein, is a ubiquitous 32 kDa member of the ATG family of proteins. ATG5 exists as a covalent heterodimer with ATG12 through the creation of a Lys-Gly linkage. The ATG5:ATG12 heterodimer associates noncovalently with an ATG16 multimer to generate autophagosomes. Human ATG5 is 275 amino acids in length and contains N- and C-terminal ubiquitin-like domains (aa 15-105 and 187-275) separated by a helix-rich linker region that contains a dimerizing Lys at position 130. There are two potential alternate start sites at Met80 and Met173. Over aa 99-193, human ATG5 is 97% aa identical to mouse ATG5.