

Accession # Q9H1Y0

Human/Mouse/Rat ATG5 Antibody

Monoclonal Mouse IgG_{2B} Clone # 603813 Catalog Number: MAB5294

Human/Mouse/Rat

Detects human, mouse, and rat ATG5 in Western blots.

Monoclonal Mouse IgG_{2B} Clone # 603813

Protein A or G purified from hybridoma culture supernatant

E. coli-derived recombinant human ATG5

Asn99-Thr193

APPLICATIONS

DESCRIPTION

Source

Purification

Immunogen

Formulation

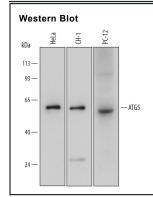
Species Reactivity
Specificity

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.

Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

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

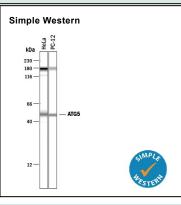
DATA



Detection of Human, Mouse, and Rat ATG5 by Western Blot.

*Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line, CH-1 mouse B cell lymphoma cell line, and PC-12 rat adrenal pheochromocytoma cell line. PVDF Membrane was probed with 0.5 µg/mL of Mouse Anti-Human/Mouse/Rat ATG5 Monoclonal Antibody (Catalog # MAB5294) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for ATG5 at approximately 50 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.



Detection of Human and Rat ATG5 by Simple Western™. Simple Western lane view shows lysates of HeLa human cervical epithelial carcinoma cell line and PC-12 rat adrenal pheochromocytoma cell line, loaded at 0.2 mg/mL. A specific band was detected for ATG5 at approximately 51 kDa (as indicated) using 25 µg/mL of Mouse Anti-Human/Mouse/Rat ATG5 Monoclonal Antibody (Catalog # MAB5294). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

PREPARATION AND STORAGE

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

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

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.

