

Anti-ATG5 Mouse mAb

Purified Recombinant Mouse Monoclonal Antibody

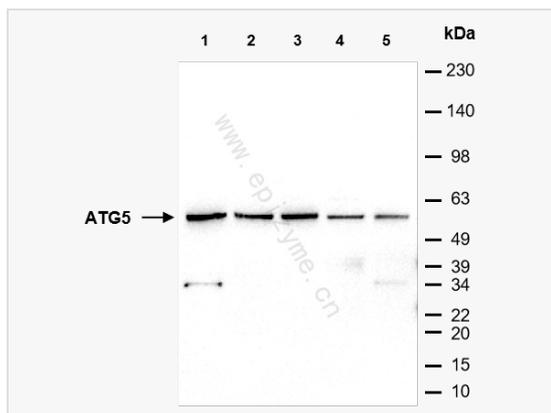
Catalog # M014686

Product Information

Application	WB, IHC-P/IF (Tissue-P), ELISA
Reactivity	Rat, Mouse (Cell), Human
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Mouse
Clonality	Monoclonal
Clone No.	66T71M49
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant protein of human ATG5
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-ATG5 Mouse mAb [66T71M49] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	APG 5, APG 5L, APG5, APG5 autophagy 5 like, APG5 like, APG5-like, APG5L, Apoptosis specific protein, Apoptosis-specific protein, ASP, ATG 5, Atg5, ATG5 autophagy related 5 homolog, ATG5_HUMAN, Autophagy protein 5, Autophagy related 5, hAPG5, Homolog of S Cerevisiae autophagy 5, OTTHUMP00000040507.
Calculated MW	Calculated MW: 32 kDa; Observed MW: 55 kDa
Uniprot ID	Q9HIY0
Gene ID	9474
Background	Involved in autophagic vesicle formation. Conjugation with ATG12, through a ubiquitin-like conjugating system involving ATG7 as an E1-like activating enzyme and ATG10 as an E2-like conjugating enzyme, is essential for its function. The ATG12-ATG5 conjugate acts as an E3-like enzyme which is required for lipidation of ATG8 family proteins and their association to the vesicle membranes. Involved in mitochondrial quality control after oxidative damage, and in subsequent cellular longevity. Plays a critical role in multiple aspects of lymphocyte development and is essential for both B and T lymphocyte survival and proliferation. Required for optimal processing and presentation of antigens for MHC II. Involved in the maintenance of axon morphology and membrane structures, as well as in normal adipocyte differentiation. Promotes primary ciliogenesis through removal of OFD1 from centriolar satellites and degradation of IFT20 via the autophagic pathway.
Cellular Location	Cytoplasm. Preautophagosomal structure membrane. Colocalizes with nonmuscle actin. The conjugate detaches from the membrane immediately before or after autophagosome formation is completed (By similarity). Localizes also to discrete punctae along the ciliary axoneme and to the base of the ciliary axoneme.



Western Blot - Anti-ATG5 Mouse mAb [66T71M49]

All lanes: M014686 at 1:1,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: Raw264.7 (Mouse mononuclear macrophage leukemia cell) whole cell lysates

Lane 3: C2C12 (Mouse myoblasts epithelial cell) whole cell lysates

Lane 4: U2OS (Human osteosarcoma epithelial cell) whole cell lysates

Lane 5: T24 (Human bladder cancer epithelial cell) whole cell lysates

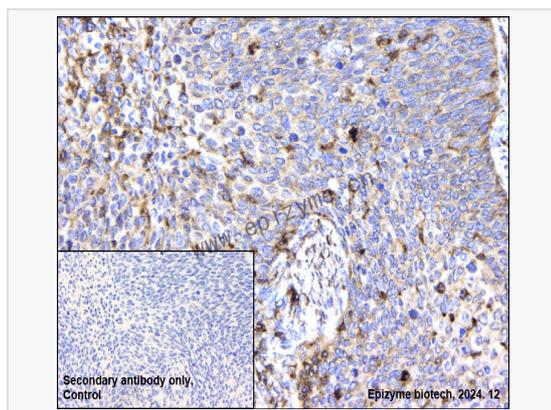
Lysates/proteins at 10 µg per lane.

Secondary antibody: Goat Anti-Mouse IgG (H+L), HRP Conjugated (Cat. No. LF101) at 1:5,000 dilution

Predicted band size: 32 kDa

Observed band size: 55 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunohistochemistry - Anti-ATG5 Mouse mAb [66T71M49]

Sample: Paraformaldehyde-fixed, paraffin embedded human cervical cancer tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: M014686 at 1:200 dilution

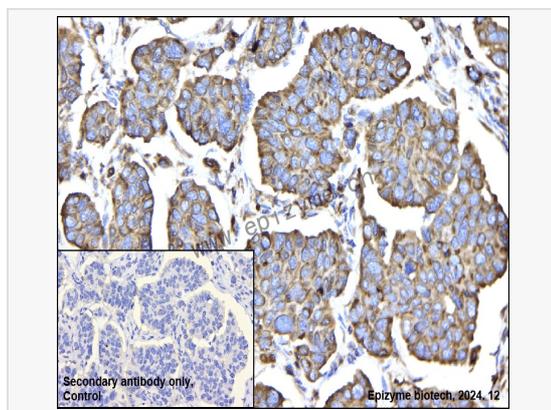
Secondary antibody: Goat Anti-Mouse IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-ATG5 Mouse mAb [66T71M49]

Sample: Paraformaldehyde-fixed, paraffin embedded human ovarian cancer tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: M014686 at 1:200 dilution

Secondary antibody: Goat Anti-Mouse IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.