

10-6623: Mouse Monoclonal Antibody to ATG3 (Clone: 1377CT239.6.1.12)(Discontinued)

Clonality :	Monoclonal
Clone Name :	1377CT239.6.1.12
Application :	WB,IHC-P
Reactivity :	Human,Mouse
Gene :	ATG3
Gene ID :	64422
Uniprot ID :	Q9NT62
Format :	Purified
Alternative Name :	Ubiquitin-like-conjugating enzyme ATG3, 632-, Autophagy-related protein 3, APG3-like, hApg3, Protein PC3-96, ATG3, APG3, APG3L
Isotype :	Mouse IgG1,Kappa

Description

E2 conjugating enzyme required for the cytoplasm to vacuole transport (Cvt), autophagy, and mitochondrial homeostasis. Responsible for the E2-like covalent binding of phosphatidylethanolamine to the C-terminal Gly of ATG8-like proteins (GABARAP, GABARAPL1, GABARAPL2 or MAP1LC3A). The ATG12- ATG5 conjugate plays a role of an E3 and promotes the transfer of ATG8-like proteins from ATG3 to phosphatidylethanolamine (PE). This step is required for the membrane association of ATG8-like proteins. The formation of the ATG8-phosphatidylethanolamine conjugates is essential for autophagy and for the cytoplasm to vacuole transport (Cvt). Preferred substrate is MAP1LC3A. Also acts as an autocatalytic E2-like enzyme, catalyzing the conjugation of ATG12 to itself, ATG12 conjugation to ATG3 playing a role in mitochondrial homeostasis but not in autophagy. ATG7 (E1-like enzyme) facilitates this reaction by forming an E1-E2 complex with ATG3. Promotes primary ciliogenesis by removing OFD1 from centriolar satellites via the autophagic pathway.

Product Info

Amount :	80 µl / 400 µl
Purification :	Protein G Chromatography
Content :	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Storage condition :	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term store at -20°C in small aliquots to prevent freeze-thaw cycles.

Application Note

IHC-P~1:25|| WB~1:2000

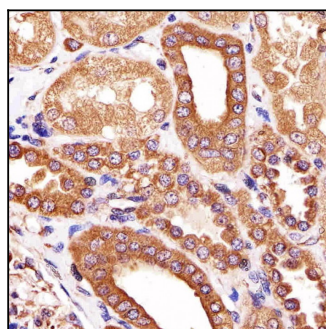


Figure 1: Immunohistochemical analysis of paraffin-embedded h kidney section using ATG3 Antibody (10-6623). ATG3 Antibody was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

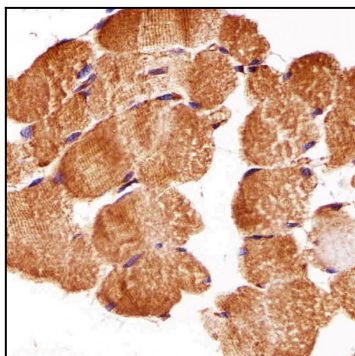


Figure 2: Immunohistochemical analysis of paraffin-embedded h skeletal muscle section using ATG3 Antibody (10-6623). ATG3 Antibody was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

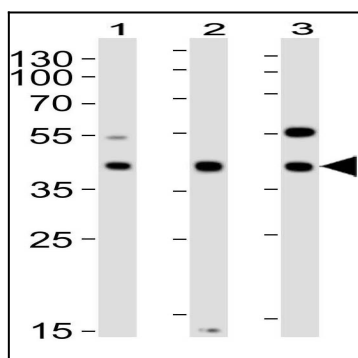


Figure 3: Western blot analysis of ATG3 Antibody (10-6623) with Lane 1: THP-1 cell line, Lane 2: mouse liver, Lane 3: mouse testis tissue . ATG3 Antibody was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L (HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20µg per lane.