Anti-ATG4D Mouse mAb

Purified Recombinant Mouse Monoclonal Antibody

Catalog # M014546

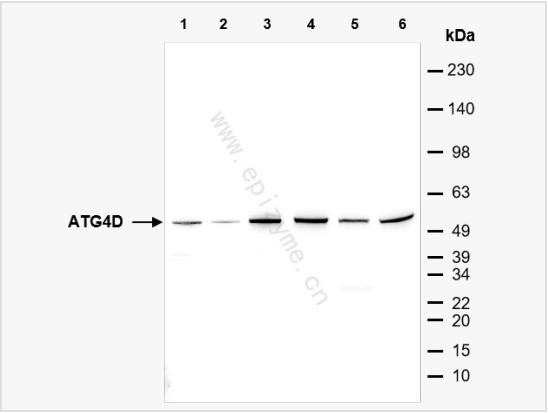
Product Information

Application	WB, IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse (Cell), Rat
Dilution	WB 1:1,000~1:4,000; IF 1:100~1:200
Host	Mouse
Clonality	Monoclonal
Clone No.	74G68S88
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant protein of human ATG4D
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-ATG4D Mouse mAb [74G68S88] is for research use only and not for use in diagnostic or therapeutic procedures.

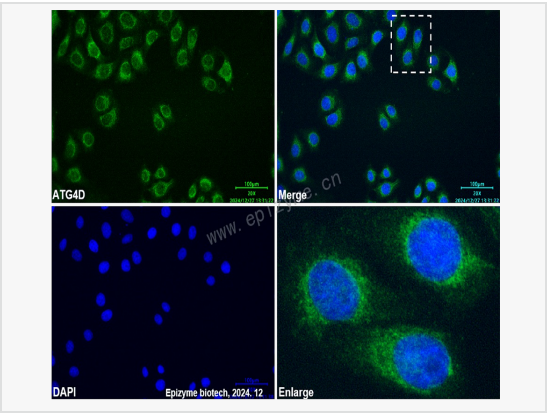
Protein Information

Synonyms	9830134P12Rik, APG4 autophagy 4 homolog D, APG4 D, APG4, S. cerevisiae, homolog of, D, APG4D, ATG4 autophagy related 4 homolog D (S. cerevisiae), Atg4d, ATG4D_HUMAN, Atg4dl, AUT like 4 cysteine endopeptidase, AUT-like 4 cysteine endopeptidase, AUTL4, Autophagin 4, Autophagin-4, autophagy 4, S. cerevisiae, homolog of, D, autophagy related 4D, cysteine peptidase, Autophagy related cysteine endopeptidase 4, Autophagy related protein 4 homolog D, Autophagy-related cysteine endopeptidase 4, Autophagy-related protein 4 homolog D, Cysteine protease ATG4D, Cysteine protease involved in autophagy, MGC31226.
Calculated MW	Calculated MW: 53 kDa; Observed MW: 53 kDa
Uniprot ID	Q86TL0
Gene ID	84971
Background	Autophagy is the process by which endogenous proteins and damaged organelles are destroyed intracellularly. Autophagy is postulated to be essential for cell homeostasis and cell remodeling during differentiation, metamorphosis, non-apoptotic cell death, and aging. Reduced levels of autophagy have been described in some malignant tumors, and a role for autophagy in controlling the unregulated cell growth linked to cancer has been proposed. This gene belongs to the autophagy-related protein 4 (Atg4) family of C54 endopeptidases. Members of this family encode proteins that play a role in the biogenesis of autophagosomes, which sequester the cytosol and organelles for degradation by lysosomes. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013].
Cellular Location	Cytoplasm.

Validation Images



Western Blot - Anti-ATG4D Mouse mAb [74G68S88]
All lanes: M014546 at 1:4,000 dilution
Lane 1: Raw264.7 (Mouse mononuclear macrophage leukemia cell) whole cell lysates
Lane 2: C2C12 (Mouse myoblasts epithelial cell) whole cell lysates
Lane 3: U2OS (Human osteosarcoma epithelial cell) whole cell lysates
Lane 4: Rat heart whole tissue lysates
Lane 5: Mouse small intestine whole tissue lysates
Lane 6: Mouse muscle whole tissue 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: 53 kDa
Observed band size: 53 kDa
Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-ATG4D Mouse mAb [74G68S88]
Sample: HeLa cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibody: M014546 at 1:100 dilution
Secondary antibody: Goat anti-Mouse (488) at 1:1,000 dilution (shown in green)
Nuclei were stained with DAPI (shown in blue).