

## ATG4D monoclonal antibody

Catalog: MB67142

Host: Mouse

Reactivity: Human

### Background:

Autophagy, a process that results in the lysosomal-dependent degradation of cytosolic compartments, is carried out by the autophagosome, which is a double-membrane vesicle whose formation is catalyzed by several autophagy-related gene (Atg) proteins. Atg4D (autophagy-related gene 4D), also known as APG4D or AURL4, is a 474 amino acid protein that localizes to the cytoplasm and belongs to the C-54 family of cysteine proteases. Expressed predominately in skeletal muscle, but also present in testis, Atg4D functions as a cysteine protease that is required for autophagy and functions to specifically cleave the C-terminal region of target proteins, thereby allowing the target proteins to bind to autophagosomes. The enzymatic activity of Atg4D is inhibited by N-ethylmaleimide, a thiol reactive compound that is capable of modifying cysteine residues in proteins and peptides.

### Product:

Mouse IgG1 kappa. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.

### Molecular Weight:

~ 50 kDa

### Swiss-Prot:

Q86TL0

### Purification&Purity:

This antibody is purified through a protein G column.

### Applications:

WB (1/1000 - 1/2000)

### Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

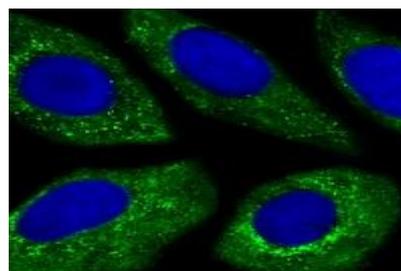
### Specificity:

Recognizes endogenous levels of ATG4D protein.

### DATA:



Western blot analysis of ATG4D expression in A431 (A) whole cell lysates.



Immunofluorescent analysis of ATG4D staining in U251 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

### Note:

For research use only, not for use in diagnostic procedure.

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