



# APG7 mouse mAb

<b>Catalog No</b>	YP-mAb-12443
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB
<b>Gene Name</b>	ATG7 APG7L
<b>Protein Name</b>	APG7
<b>Immunogen</b>	Synthesized peptide derived from human APG7 AA range: 521-570
<b>Specificity</b>	This antibody detects endogenous levels of Human,Mouse,Rat APG7
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Monoclonal, mouse,IgG
<b>Purification</b>	The antibody was affinity-purified from mouse serum by affinity-chromatography using specific immunogen.
<b>Dilution</b>	WB 1:1000-2000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	Ubiquitin-like modifier-activating enzyme ATG7 (ATG12-activating enzyme E1 ATG7;Autophagy-related protein 7;APG7-like;hAGP7;Ubiquitin-activating enzyme E1-like protein)
<b>Calculated Molecular Weight</b>	77KD
<b>Cell Pathway</b>	Cytoplasm . Preautophagosomal structure . Localizes also to discrete punctae along the ciliary axoneme and to the base of the ciliary axoneme. .
<b>Tissue Specificity</b>	Widely expressed, especially in kidney, liver, lymph nodes and bone marrow.
<b>Function</b>	domain:The C-terminal part of the protein is essential for the dimerization and interaction with ATG3 and ATG12.,function:Functions as an E1 enzyme essential for multisubstrates such as GABARAPL1 and ATG12. Forms intermediate conjugates with GABARAPL1 (GABARAPL2, GABARAP or MAP1ALC3). Formation of the final GABARAPL1-PE conjugate is essential for autophagy.,similarity:Belongs to the ATG7 family.,subunit:Homodimer (By similarity). Interacts with ATG3 and ATG12. The complex, composed of ATG3 and ATG7, plays a role in the conjugation of ATG12 to ATG5.,tissue specificity:Widely expressed, especially in kidney, liver, lymph nodes and bone marrow.,
<b>Background</b>	This gene encodes an E1-like activating enzyme that is essential for autophagy and cytoplasmic to vacuole transport. The encoded protein is also thought to modulate p53-dependent cell cycle pathways during prolonged metabolic stress.



It has been associated with multiple functions, including axon membrane trafficking, axonal homeostasis, mitophagy, adipose differentiation, and hematopoietic stem cell maintenance. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015],

**matters needing attention**

Avoid repeated freezing and thawing!

**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

**Products Images**