

ATG5 Recombinant Rabbit mAb

Catalog # AP96649

Product Information

Application	WB, IHC-P, IHC-F, IF, IP
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Recombinant
Calculated MW	32 KDa
Physical State	Liquid
Immunogen	A synthesized peptide derived from human ATG5
Epitope Specificity	1-64
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS(pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the ATG5 family.
SUBUNIT	The ATG5-ATG12 conjugate forms a complex with several units of ATG16. Interacts with TECPR1; the interaction is direct and does not take place when ATG16 is associated with the ATG5-ATG12 conjugate.
Post-translational modifications	Conjugated to ATG12; which is essential for autophagy, but is not required for association with isolation membrane.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	In yeast, autophagy is an essential process for survival during nutrient starvation and cell differentiation. The process of autophagy is characterized as a non-selective degradation of cytoplasmic proteins into membrane structures called autophagosomes, and it is dependent on several proteins, including the autophagy proteins APG5 and APG7. Yeast Apg7 and the human homolog, APG7, share similarities with the ubiquitin-activating enzyme E1 in <i>Saccharomyces cerevisiae</i> and are likewise responsible for enzymatically activating the autophagy conjugation system. Apg5 and the human homolog, APG5 (also designated apoptosis-specific protein or APS), function as substrates for the autophagy protein Apg12. These proteins are covalently bonded together to form Apg12/APG5 conjugates, which are required for the progression of autophagy.

Additional Information

Other Names	APG5; APG5-LIKE; APG5L; ASP; SCAR25; hAPG5; 2010107M05Rik; 3110067M24Rik; Atg5l; Paddy; ATG5_HUMAN; ATG5; Apoptosis-specific protein; ATG5_MOUSE; ATG5_RAT; autophagy related 5; APG5 (autophagy 5, <i>S. cerevisiae</i>)-like; APG5 autophagy 5-like (<i>S. cerevisiae</i>); ATG5 autophagy related 5 homolog (<i>S. cerevisiae</i>)
Dilution	WB=1:500-2000,IHC-P=1:50-200,IP=1:20-100,IHC-F=1:50-200,IF=1:50-200
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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Function Required for autophagy. Conjugates to ATG12 and associates with isolation membrane to form cup-shaped isolation membrane and autophagosome. The conjugate detaches from the membrane immediately before or after autophagosome formation is completed (By similarity). May play an important role in the apoptotic process, possibly within the modified cytoskeleton. Its expression is a relatively late event in the apoptotic process, occurring downstream of caspase activity.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.