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ATG12 Rabbit pAb

Catalog # AP100147

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	O94817
Other Accession	O94817
Reactivity	Rat, Mouse
Predicted	Pig, Human, Rabbit, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	15113
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Apg12
Epitope Specificity	101-140/140
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 ATG12 family.
SUBUNIT	Cytoplasm.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Autophagy is a process of bulk protein degradation in which cytoplasmic components, including organelles, are enclosed in double-membrane structures called autophagosomes and delivered to lysosomes or vacuoles for degradation. ATG12 is the human homolog of a yeast protein involved in autophagy (Mizushima et al., 1998[PubMed 9852036]).[supplied by OMIM].

Additional Information

Gene ID	9140
Other Names	APG12; APG12L; FBR93; HAPG12; 4931423H11Rik; A330058M13Rik; Atg12l; ATG12_HUMAN; ATG12; Autophagy-related protein 12 (APG12-like); ATG12_MOUSE; ATG12_RAT; autophagy related 12; Apg12 (autophagy 12, S. cerevisiae)-like; APG12 autophagy 12-like (S. cerevisiae); ATG12 autophagy related 12 homolog (S. cerevisiae); APG12 autophagy 12-like
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
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.

Protein Information

Name	ATG12 (HGNC:588)
Synonyms	APG12, APG12L
Function	Ubiquitin-like protein involved in autophagy vesicles formation. Conjugation with ATG5 through a ubiquitin-like conjugating system involving also ATG7 as an E1-like activating enzyme and ATG10 as an E2-like conjugating enzyme, is essential for its function. The ATG12-ATG5 conjugate acts as an E3-like enzyme which is required for lipidation of ATG8 family proteins and their association to the vesicle membranes. As part of the ATG8 conjugation system with ATG5 and ATG16L1, required for recruitment of LRRK2 to stressed lysosomes and induction of LRRK2 kinase activity in response to lysosomal stress (By similarity).
Cellular Location	Cytoplasm. Preautophagosomal structure membrane; Peripheral membrane protein. Note=TECPR1 recruits the ATG12- ATG5 conjugate to the autolysosomal membrane
Tissue Location	Ubiquitous..

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