



Rabbit Anti-phospho-ATG3 (Tyr18) antibody

SL5204R

Product Name:	phospho-ATG3 (Tyr18)
Chinese Name:	磷酸化自噬相关蛋白3抗体
Alias:	2610016C12Rik; Apg 3; APG3; APG3 autophagy 3 like; APG3 like; APG3-like; APG3L; Apg3p; ATG 3; ATG3; ATG3 autophagy related 3 homolog; ATG3 autophagy related 3 homolog (S. cerevisiae); ATG3_HUMAN; Autophagy Apg3p/Aut1p like; Autophagy related protein 3; Autophagy-related protein 3; DKFZp564M1178; FLJ22125; hApg3; MGC15201; OTTHUMP00000214547; OTTHUMP00000214548; PC3 96; Protein PC3-96; Ubiquitin-like-conjugating enzyme ATG3.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	36kDa
Cellular localization:	cytoplasmicMitochondrion
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human ATG3 around the phosphorylation site of Tyr18:AE(p-Y)LT
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed

E2-like enzyme involved in autophagy and mitochondrial homeostasis. Catalyzes the conjugation of ATG8-like proteins (GABARAP, GABARAPL1, GABARAPL2 or MAP1LC3A) to phosphatidylethanolamine (PE). PE-conjugation to ATG8-like proteins is essential for autophagy. Preferred substrate is MAP1LC3A. Also acts as an autocatalytic E2-like enzyme, catalyzing the conjugation of ATG12 to itself, ATG12 conjugation to ATG3 playing a role in mitochondrial homeostasis but not in autophagy. ATG7 (E1-like enzyme) facilitates this reaction by forming an E1-E2 complex with ATG3.

Function:

E2-like enzyme involved in autophagy and mitochondrial homeostasis. Catalyzes the conjugation of ATG8-like proteins (GABARAP, GABARAPL1, GABARAPL2 or MAP1LC3A) to phosphatidylethanolamine (PE). PE-conjugation to ATG8-like proteins is essential for autophagy. Preferred substrate is MAP1LC3A. Also acts as an autocatalytic E2-like enzyme, catalyzing the conjugation of ATG12 to itself, ATG12 conjugation to ATG3 playing a role in mitochondrial homeostasis but not in autophagy. ATG7 (E1-like enzyme) facilitates this reaction by forming an E1-E2 complex with ATG3.

Subunit:

Interacts with ATG7 and ATG12. The complex, composed of ATG3 and ATG7, plays a role in the conjugation of ATG12 to ATG5. Interacts with FBNP1L.

Subcellular Location:

Cytoplasm.

Tissue Specificity:

Widely expressed, with a highest expression in heart, skeletal muscle, kidney, liver and placenta.

Post-translational modifications:

Conjugated to ATG12 at Lys-243. ATG12-conjugation plays a role in regulation of mitochondrial homeostasis and cell death, while it is not involved in PE-conjugation to ATG8-like proteins and autophagy (By similarity).

Similarity:

Belongs to the ATG3 family.

SWISS:

Q9NT62

Gene ID:

64422

Database links:

Product Detail:

[Entrez Gene: 64422](#)Human

[Entrez Gene: 67841](#)Mouse

[Entrez Gene: 171415](#)Rat

[Omim: 609606](#)Human

[SwissProt: Q9NT62](#)Human

[SwissProt: Q9CPX6](#)Mouse

[SwissProt: Q6AZ50](#)Rat

[Unigene: 477126](#)Human

[Unigene: 41775](#)Mouse

[Unigene: 3084](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.