

## Product datasheet

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# ARG54815 anti-ATG12 antibody

Package: 100 μl Store at: -20°C

#### **Summary**

Product Description Rabbit Polyclonal antibody recognizes ATG12

Tested Reactivity Hu, Ms

Tested Application ICC/IF, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name ATG12

Species Human

Immunogen KLH-conjugated synthetic peptide corresponding to aa. 8-38 (N-terminus) of Human ATG12.

Conjugation Un-conjugated

Alternate Names Ubiquitin-like protein ATG12; FBR93; HAPG12-like; Autophagy-related protein 12; APG12L;

APG12

#### **Application Instructions**

Application table	Application	Dilution
	ICC/IF	1:50 - 1:100
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### **Properties**

Form Liquid

Purification Purification with Protein G.

Buffer PBS and 0.09% (W/V) Sodium azide

Preservative 0.09% (W/V) Sodium azide

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Database links GeneID: 67526 Mouse

GeneID: 9140 Human

Swiss-port # O94817 Human

Swiss-port # Q9CQY1 Mouse

Gene Symbol ATG12

Gene Full Name autophagy related 12

Background 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, Mar 2008]

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. The ATG12-ATG5 conjugate also regulates negatively the innate antiviral immune response by blocking the type I IFN production pathway through direct association with RARRES3 and MAVS. Plays also a role in translation or delivery of incoming viral RNA to the translation apparatus.

[UniProt]

Research Area Cancer antibody; Cell Biology and Cellular Response antibody; Cell Death antibody; Metabolism

antibody

Calculated Mw 15 kDa

PTM Acetylated by EP300.

Cellular Localization Cytoplasm. Preautophagosomal structure membrane; Peripheral membrane protein. Note=TECPR1

recruits the ATG12-ATG5 conjugate to the autolysosomal membrane