

## ARG56217 anti-ATG12 antibody

Package: 100 µl  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes ATG12
Tested Reactivity	Hu
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	ATG12
Species	Human
Immunogen	KLH-conjugated synthetic peptide corresponding to aa. 1-30 (N-terminus) of Human ATG12.
Conjugation	Un-conjugated
Alternate Names	Ubiquitin-like protein ATG12; FBR93; HAPG12; APG12-like; Autophagy-related protein 12; APG12L; APG12

### Application Instructions

Application table	Application	Dilution
	ICC/IF	1:200
	IHC-P	1:50 - 1:100
	WB	1:1000 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	A549	

### Properties

Form	Liquid
Purification	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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. 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.

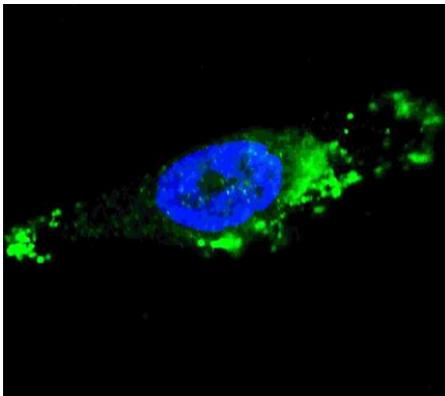
## Bioinformation

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Database links	<a href="#">GeneID: 9140 Human</a> <a href="#">Swiss-port # O94817 Human</a>
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]
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

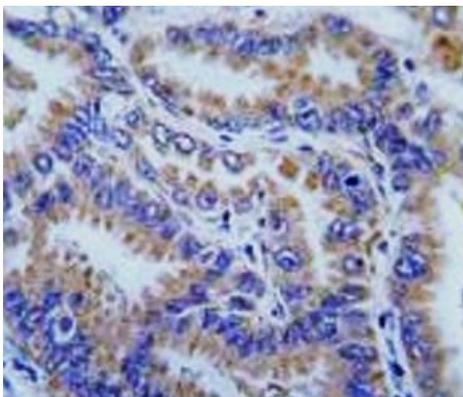
## Images

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ARG56217 anti-ATG12 antibody ICC/IF image

Immunofluorescence: U251 cells were treated with Chloroquine (50  $\mu$ M, 16 hours), then fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.2%, 30 min). Cells were then stained with ARG56217 anti-ATG12 antibody (green) at 1:200 dilution, 2 hours at room temperature. Nuclei were counterstained with Hoechst 33342 (blue) (10  $\mu$ g/ml, 5 min).



ARG56217 anti-ATG12 antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human lung carcinoma tissue stained with ARG56217 anti-ATG12 antibody.

ARG56217 anti-ATG12 antibody WB image



Western blot: 20 µg of A549 cell lysate stained with ARG56217 anti-ATG12 antibody at 1:2000 dilution.