

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

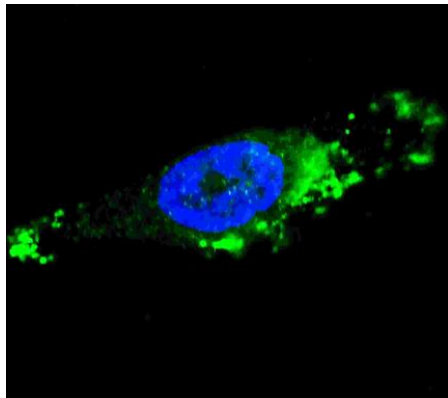
Application table	Application	Dilution
	ICC/IF	1:200
	IHC-P	1:50 - 1:100
	WB	1:1000 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	A549	

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.

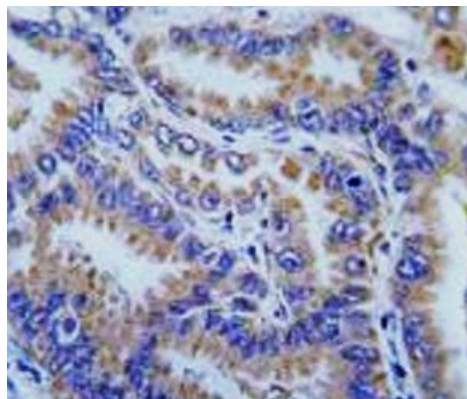
Database links	GeneID: 9140 Human Swiss-port # O94817 Human
Gene Symbol	ATG12
Gene Full Name	autophagy related 12
Background	Autophagy is a process of bulk protein degradation in which cytoplasmic components, including organelles, are enclosed in double-membrane structures called autophagosomes and delivered 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



ARG56217 anti-ATG12 antibody ICC/IF image

Immunofluorescence: U251 cells were treated with Chloroquine (50 μ 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 μ 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.