

## ARG42494 anti-ATG12 antibody

Package: 100 µg  
Store at: -20°C

### Summary

Product Description	Goat Polyclonal antibody recognizes ATG12
Tested Reactivity	Hu, Ms, Rat, Dog, Mk
Tested Application	ICC/IF, WB
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	ATG12
Species	Human
Immunogen	Purified recombinant peptide within aa.65 to the 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	1:50 - 1:250
	WB	1:250 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

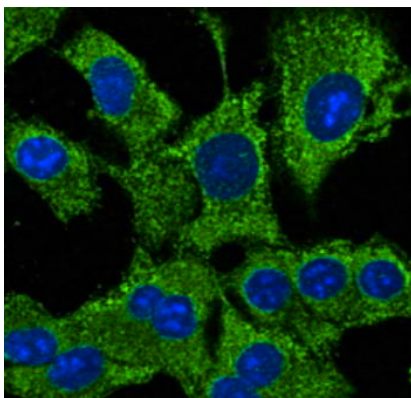
### Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS, 0.05% Sodium azide and 20% Glycerol.
Preservative	0.05% Sodium azide
Stabilizer	20% Glycerol
Concentration	3 mg/ml
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

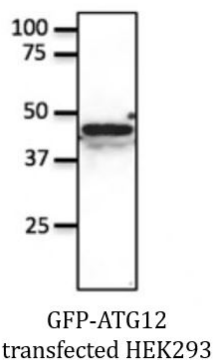
Gene Symbol	ATG12
Gene Full Name	autophagy related 12
Background	Autophagy is a process of bulk protein degradation in which cytoplasmic components, including organelles, are enclosed in double-membrane structures called autophagosomes and delivered to lysosomes or vacuoles for degradation. ATG12 is the human homolog of a yeast protein involved in autophagy (Mizushima et al., 1998 [PubMed 9852036]).[supplied by OMIM, Mar 2008]
Function	<p>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.</p> <p>(Microbial infection) May act as a proviral factor. In association with ATG5, negatively regulates the innate antiviral immune response by impairing the type I IFN production pathway upon vesicular stomatitis virus (VSV) infection (PubMed:17709747). Required for the translation of incoming hepatitis C virus (HCV) RNA and, thereby, for the initiation of HCV replication, but not required once infection is established (PubMed:19666601). [UniProt]</p>
Calculated Mw	15 kDa
PTM	Acetylated by EP300. [UniProt]
Cellular Localization	Cytoplasm. Preautophagosomal structure membrane; Peripheral membrane protein. Note=TECPR1 recruits the ATG12-ATG5 conjugate to the autolysosomal membrane. [UniProt]

## Images



ARG42494 anti-ATG12 antibody ICC/IF image

Immunofluorescence: Hepa1-6 cells were fixed with methanol. Cells were stained with ARG42494 anti-ATG12 antibody (green) at 1:50 dilution. Nuclear staining (blue).



ARG42494 anti-ATG12 antibody WB image

Western blot: GFP-ATG12 transfected HEK293 cells. 100 µg of cell lysate stained with ARG42494 anti-ATG12 antibody at 1:500 dilution.