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, IHC-F, IHC-Fr, 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
IHC-F	1:200 - 1:1000
IHC-Fr	1:200 - 1:1000
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

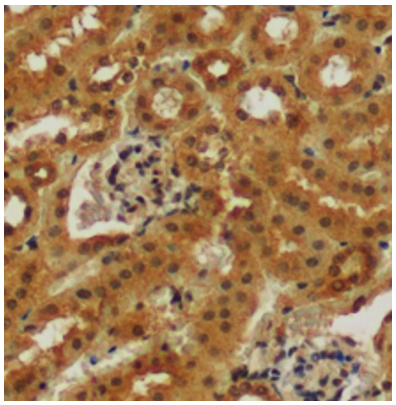
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS, 0.05% Sodium azide and 20% Glycerol.
Preservative	0.05% Sodium azide
Stabilizer	20% Glycerol
Concentration	3 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, 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

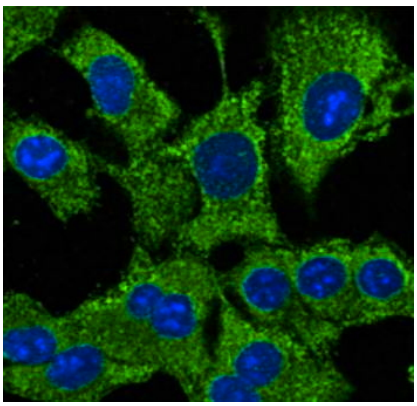
Gene Symbol	ATG12
Gene Full Name	autophagy related 12
Background	Autophagy is a process of bulk protein degradation in which cytoplasmic components, including organelles, are enclosed in double-membrane structures called autophagosomes and delivered to lysosomes or vacuoles for degradation. ATG12 is the human homolog of a yeast protein involved in autophagy (Mizushima et al., 1998 [PubMed 9852036]).[supplied by OMIM, Mar 2008]
Function	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. (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]
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



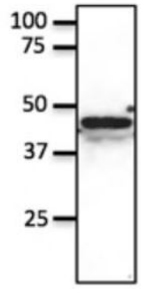
ARG42494 anti-ATG12 antibody IHC-P image

Immunohistochemistry: Human pancreas stained with ARG42494 anti-ATG12 antibody at 1:500 dilution.



ARG42494 anti-ATG12 antibody ICC/IF image

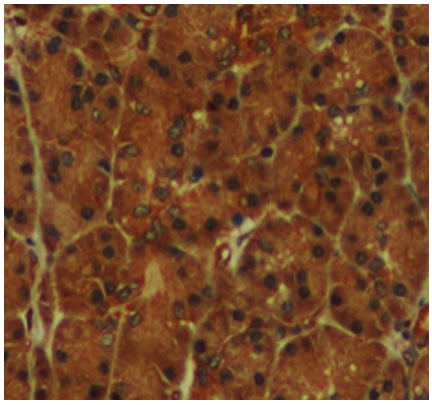
Immunofluorescence: Hepa1-6 cells were fixed with methanol. Cells were stained with ARG42494 anti-ATG12 antibody (green) at 1:50 dilution. Nuclear staining (blue).



GFP-ATG12
transfected HEK293

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.



ARG42494 anti-ATG12 antibody IHC-P image

Immunohistochemistry: Mouse kidney stained with ARG42494 anti-ATG12 antibody at 1:500 dilution.