ARG54818
anti-ATG4B antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes ATG4B
Tested Reactivity	Hu
Predict Reactivity	Ms
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	ATG4B
Species	Human
Immunogen	KLH-conjugated synthetic peptide corresponding to aa. 358-390 (C-terminus) of Human ATG4B.
Conjugation	Un-conjugated
Alternate Names	Cysteine protease ATG4B; hAPG4B; Autophagin-1; APG4B; Autophagy-related protein 4 homolog B; Autophagy-related cysteine endopeptidase 1; EC 3.4.22.-; AUT-like 1 cysteine endopeptidase; AUTL1

Application Instructions

Application table

Application	Dilution
ICC/IF	1:100
IHC-P	Assay-dependent
WB	1:1000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	HeLa

Properties

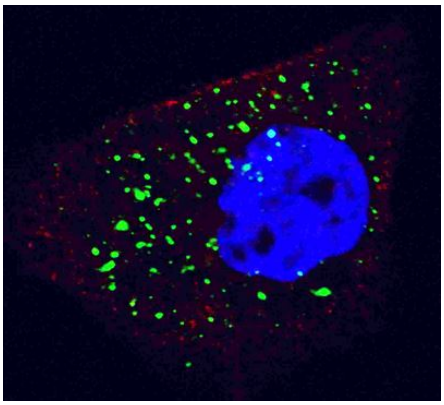
Form	Liquid
Purification	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Buffer	PBS and 0.09% (W/V) Sodium azide
Preservative	0.09% (W/V) Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C 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

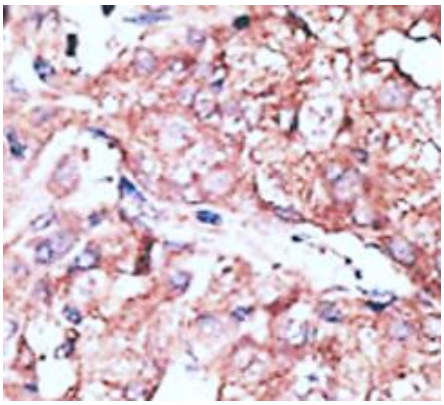
Database links	GeneID: 23192 Human Swiss-port # Q9Y4P1 Human
Gene Symbol	ATG4B
Gene Full Name	autophagy related 4B, cysteine peptidase
Background	Autophagy is the process by which endogenous proteins and damaged organelles are destroyed intracellularly. Autophagy is postulated to be essential for cell homeostasis and cell remodeling during differentiation, metamorphosis, non-apoptotic cell death, and aging. Reduced levels of autophagy have been described in some malignant tumors, and a role for autophagy in controlling the unregulated cell growth linked to cancer has been proposed. This gene encodes a member of the autophagin protein family. The encoded protein is also designated as a member of the C-54 family of cysteine proteases. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008]
Function	Cysteine protease required for the cytoplasm to vacuole transport (Cvt) and autophagy. Cleaves the C-terminal amino acid of ATG8 family proteins MAP1LC3, GABARAPL1, GABARAPL2 and GABARAP, to reveal a C-terminal glycine. Exposure of the glycine at the C-terminus is essential for ATG8 proteins conjugation to phosphatidylethanolamine (PE) and insertion to membranes, which is necessary for autophagy. Has also an activity of delipidating enzyme for the PE-conjugated forms. [UniProt]
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Cell Death antibody; Metabolism antibody
Calculated Mw	44 kDa
Cellular Localization	Cytoplasm.

Images



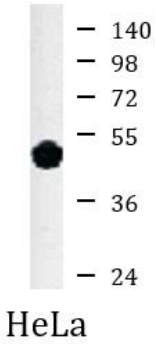
ARG54818 anti-ATG4B antibody ICC/IF image

Immunofluorescence: U251 cells were treated with Chloroquine (50 µM, 16h), then fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.2%, 30 min). Cells were then stained with ARG54818 anti-ATG4B antibody (green) at 1:100 dilution, 2 h at room temperature. Nuclei were counterstained with Hoechst 33342 (blue) (10 µg/ml, 5 min). ATG4B immunoreactivity is localized to autophagic vacuoles in the cytoplasm of U251 cells.



ARG54818 anti-ATG4B antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human cancer tissue stained with ARG54818 anti-ATG4B antibody.



ARG54818 anti-ATG4B antibody WB image

Western blot: HeLa cell lysate stained with ARG54818 anti-ATG4B antibody.