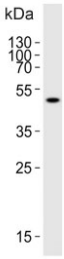
ATG4A Antibody [clone 1458CT808.66.25.69] (F54527)

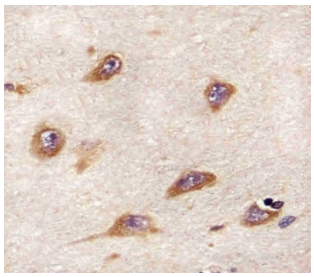
Catalog No.	Formulation	Size
F54527-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F54527-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

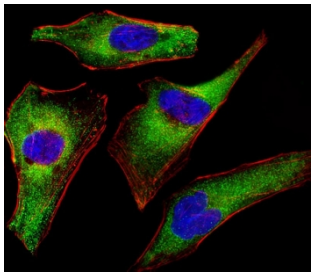
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	IgG2b, kappa
Clone Name	1458CT808.66.25.69
Purity	Protein G affinity
UniProt	Q8WYN0
Localization	Cytoplasmic
Applications	Western Blot : 1:500-1:2000 Flow Cytometry : 1:25 (1x10e6 cells) Immunohistochemistry (FFPE) : 1:25 Immunofluorescence : 1:25
Limitations	This ATG4A antibody is available for research use only.



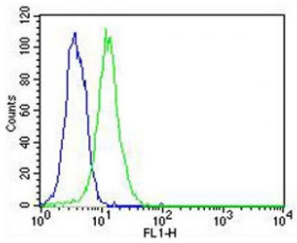
Western blot testing of human K562 cell lysate with ATG4A antibody. Predicted molecular weight ~45 kDa, commonly observed between 45-60 kDa.



IHC testing of FFPE human brain tissue with ATG4A antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



Immunofluorescent staining of fixed and permeabilized human HeLa cells with ATG4A antibody (green), DAPI nuclear stain (blue) and anti-Actin (red).



Flow cytometry testing of fixed and permeabilized human HeLa cells with ATG4A antibody; Blue=isotype control, Green= ATG4A antibody.

Description

Cysteine protease required for the cytoplasm to vacuole transport (Cvt) and autophagy. Cleaves the C-terminal amino acid of ATG8 family proteins 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. Preferred substrate is GABARAPL2 followed by MAP1LC3A and GABARAP. Has also an activity of delipidating enzyme for the PE-conjugated forms.

Application Notes

The stated application concentrations are suggested starting points. Titration of the ATG4A antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Recombinant human protein was used as the immunogen for the ATG4A antibody.

Storage

Aliquot the ATG4A antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.