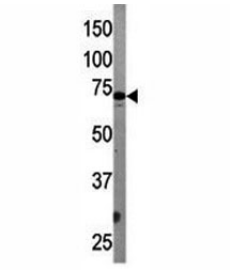
APG7 Antibody (F46228)

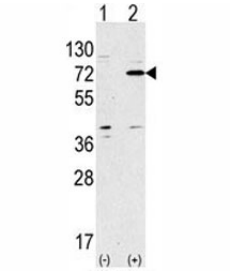
Catalog No.	Formulation	Size
F46228-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F46228-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

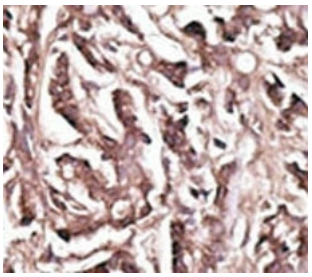
Availability	1-3 business days
Species Reactivity	Human, Mouse
Predicted Reactivity	Chicken, Rat
Format	Purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	O95352
Applications	Western Blot : 1:1000 IHC (Paraffin) : 1:50-1:100
Limitations	This APG7 antibody is available for research use only.



Western blot testing of APG7 antibody and mouse liver tissue lysate. Predicted molecular weight: 70-80 kDa.



Western blot analysis of APG7 antibody and 293 lysate transiently transfected with the ATG7 gene.



IHC analysis of FFPE human breast carcinoma tissue stained with the APG7 antibody

Description

Macroautophagy is the major inducible pathway for the general turnover of cytoplasmic constituents in eukaryotic cells, it is also responsible for the degradation of active cytoplasmic enzymes and organelles during nutrient starvation. Macroautophagy involves the formation of double-membrane bound autophagosomes which enclose the cytoplasmic constituent targeted for degradation in a membrane bound structure, which then fuse with the lysosome (or vacuole) releasing a single-membrane bound autophagic bodies which are then degraded within the lysosome (or vacuole). APG7 functions as an E1 enzyme essential for multisubstrates such as GABARAPL1 and ATG12. APG3L is an E2-like conjugating enzyme facilitating covalent binding of APG8 (MAP1LC3) to phosphatidylethanolamine (PE). APG7 (an E1-like enzyme) facilitates this reaction by forming an E1-E2 complex with APG3. Formation of the PE conjugate is essential for autophagy.

Application Notes

Titration of the APG7 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 284-313 from the human protein was used as the immunogen for this APG7 antibody.

Storage

Aliquot the APG7 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.