ATG13 Antibody

Catalog No: #25132

Orders: order@signalwayantibody.com
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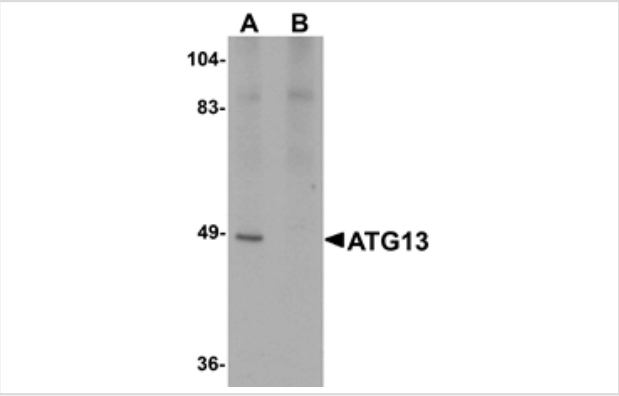
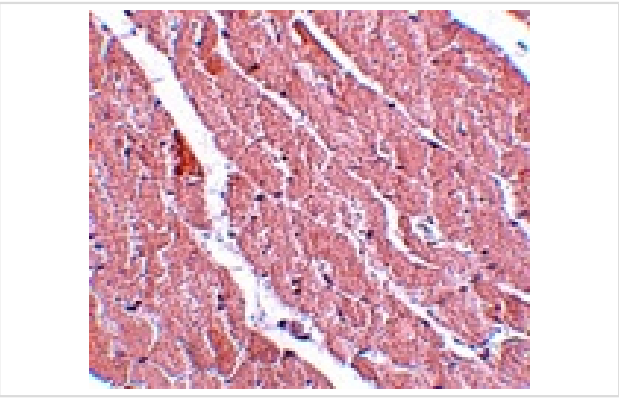
Description

Product Name	ATG13 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Affinity chromatography purified via peptide column
Applications	ELISA WB IHC
Species Reactivity	Hu Ms Rt
Immunogen Type	Peptide
Immunogen Description	Raised against a 15 amino acid peptide near the carboxy terminus of human ATG13.
Target Name	ATG13
Other Names	Autophagy-related protein 13
Accession No.	Swiss-Prot:O75143Gene ID:9776
Uniprot	O75143
GeneID	9776;
Concentration	1mg/ml
Formulation	Supplied in PBS containing 0.02% sodium azide.
Storage	Can be stored at -20°C, stable for one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Images



Western blot analysis of ATG13 in rat heart tissue lysate with ATG13 antibody at 1 ug/mL in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of ATG13 in mouse heart with ATG13 antibody at 5 ug/mL.

Background

Autophagy, the process of bulk degradation of cellular proteins through an autophagosomic-lysosomal pathway is important for normal growth control and may be defective in tumor cells. It is involved in the preservation of cellular nutrients under starvation conditions as well as the normal turnover of cytosolic components. This process is negatively regulated by TOR (Target of rapamycin) through phosphorylation of autophagy protein ATG1. ATG13 forms a complex with ULK1 and ULK2, the mammalian homologs of ATG1, and with FIP200. This complex is a target of TOR phosphorylation under normal conditions; inhibition of TOR by rapamycin or leucine deprivation leads to dephosphorylation of ATG13, ULK1 and ULK2, which then leads to autophagy. Knockdown of ATG13 inhibits autophagosome formation.

Note: This product is for in vitro research use only