PI 3 Kinase Class 3 Rabbit mAb

Catalog No: #48800

Package Size: #48800-1 50ul #48800-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

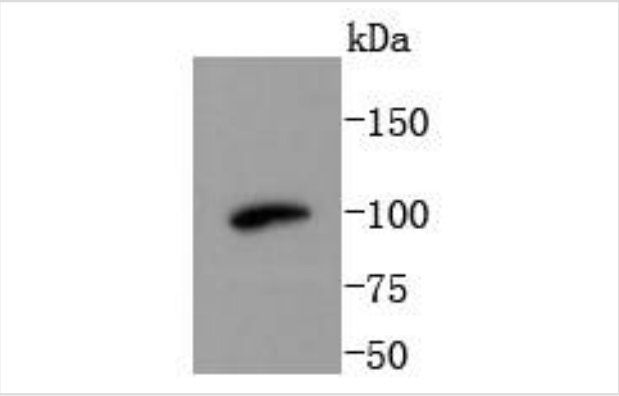
Description

Product Name	PI 3 Kinase Class 3 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SY0286
Purification	ProA affinity purified
Applications	WB, IHC
Species Reactivity	Human;Mouse;Rat
Immunogen Description	recombinant protein
Conjugates	Unconjugated
Other Names	hVps34 antibody MGC61518 antibody Phosphatidylinositol 3 kinase catalytic subunit type 3 antibody Phosphatidylinositol 3 kinase class 3 antibody Phosphatidylinositol 3 kinase p100 subunit antibody Phosphatidylinositol 3-kinase catalytic subunit type 3 antibody Phosphatidylinositol 3-kinase p100 subunit antibody Phosphoinositide 3 kinase class 3 antibody Phosphoinositide-3-kinase class 3 antibody PI3 kinase type 3 antibody PI3-kinase type 3 antibody PI3K type 3 antibody Pik3c3 antibody PK3C3_HUMAN antibody PtdIns 3 kinase type 3 antibody PtdIns-3-kinase type 3 antibody Vps 34 antibody Vps34 antibody
Accession No.	Swiss-Prot#:Q8NEB9
Calculated MW	100 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

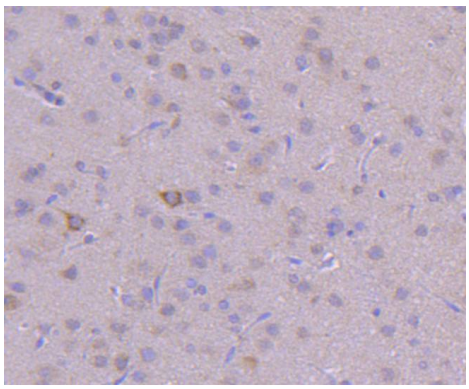
Application Details

WB: 1:1,000IHC: 1:50-1:200

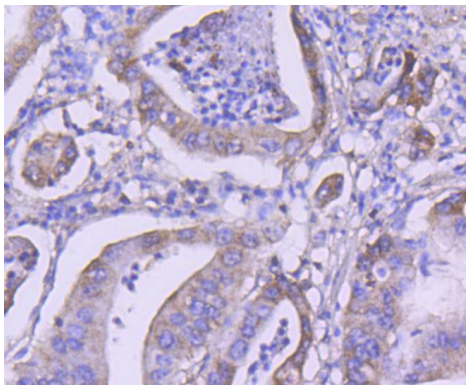
Images



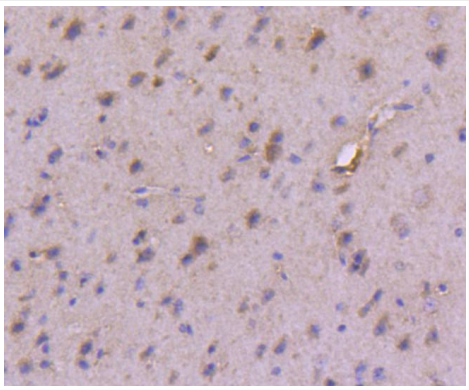
Western blot analysis of PI 3 Kinase Class 3 on C2C12 cells lysates using anti-PI 3 Kinase Class 3 antibody at 1/1,000 dilution.



Immunohistochemical analysis of paraffin-embedded rat brain tissue using anti-PI 3 Kinase Class 3 antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded human gastric carcinoma tissue using anti-PI 3 Kinase Class 3 antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue using anti-PI 3 Kinase Class 3 antibody. Counter stained with hematoxylin.

Background

Phosphatidylinositol 3-kinases (PI3Ks) phosphorylate the 3' OH position of the inositol ring of inositol lipids. PI 3-kinase p100 (phosphoinositide-3-kinase p100 subunit), also known as hVps34 or PIK3C3 (phosphoinositide-3-kinase, class III), is a member of the PI3/PI4-kinase family. It is ubiquitously expressed with predominant expression in skeletal muscle and is believed to participate in endosome to lysosome transport, multivesicular body formation, autophagy and retrograde endosome to Golgi transport. PI 3-kinase p100 is the catalytic subunit of class III PI3Ks and forms a heterodimer with p150, a regulatory subunit of class 3 PI3Ks. PI 3-kinase p100 exclusively phosphorylates phosphatidylinositol to produce PtdIns3P. Unlike class I PI3Ks, whose activities are enhanced in the presence of magnesium, PI 3-kinase p100 activity is enhanced by manganese. Its activity can also be regulated by nutrients, suggesting an important role of PI-3 kinase p100 in the regulation of mTOR protein synthesis and autophagy.

References

1. Bechtel W et al.2013. Vps34 deficiency reveals the importance of endocytosis for podocyte homeostasis. J Am Soc Nephrol 24:727-43. 2. Liu, MN. et al. 2015. Functional mechanism of the enhancement of 5-fluorouracil sensitivity by TUSC4 in colon cancer cells. Oncol Lett. 10: 3682-3688.

Published Papers

Liu Mingkun, Dong Jinsheng, Wang Li, Li Yilin, Wu Qingjuan, Zheng Qi, Zhou Xiaji, Yao Naili, Zhang Runshun, Lyu Wenliang, Bai Yuning el at.,

Ursolic and oleanolic acids suppress MNNG induced malignant transformation of human gastric mucosal epithelium by regulating the PI3 K/AKT pathway, Scientific reports, (2025)
PMID:40594240

Note: This product is for in vitro research use only and is not intended for use in humans or animals.