



# Rabbit Anti-PIK3C3 monoclonal antibody, clone TZ1397 (DCABH-1660)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Target</b>	PI 3 Kinase Class 3
<b>Immunogen</b>	Recombinant protein
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human, Mouse, Rat
<b>Clone</b>	TZ1397
<b>Purification</b>	Protein A purified.
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB, IHC
<b>Molecular Weight</b>	100 kDa
<b>Cellular Localization</b>	Midbody, Late endosome, Cytoplasmic vesicle.
<b>Positive Control</b>	C2C12, rat brain tissue, human gastric carcinoma tissue, mouse brain tissue.
<b>Format</b>	Liquid
<b>Size</b>	100 µl
<b>Buffer</b>	1×TBS (pH7.4), 1% BSA, 40% Glycerol.
<b>Preservative</b>	0.05% Sodium Azide

**Storage**

Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

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## BACKGROUND

**Introduction**

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.

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**Keywords**

hVps34;MGC61518;Phosphatidylinositol 3 kinase catalytic subunit type 3;Phosphatidylinositol 3 kinase class 3;Phosphatidylinositol 3 kinase p100 subunit;Phosphatidylinositol 3-kinase catalytic subunit type 3;Phosphatidylinositol 3-kinase p100 subunit;Phosphoinositide 3 kinase class 3;Phosphoinositide-3-kinase class 3;PI3 kinase type 3;PI3-kinase type 3;PI3K type 3;Pik3c3;PK3C3\_HUMAN;PtdIns 3 kinase type 3;PtdIns-3-kinase type 3;Vps 34;Vps34 antibody

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