



## Rabbit Anti-Human Vps34 (aa 407-420) polyclonal antibody (DPABB-JX29)

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

### PRODUCT INFORMATION

<b>Immunogen</b>	Residues 407-420 of human Vps34
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human
<b>Purification</b>	Affinity purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded.
<b>Format</b>	Purified, Liquid
<b>Concentration</b>	Lot specific
<b>Size</b>	10 µg, 50 µg, 250 µg
<b>Buffer</b>	100 mM Tris-HCl, 100 mM glycine, pH 7.5, and 50% glycerol
<b>Preservative</b>	None
<b>Storage</b>	Store at -20 °C or -80°C for long term. Avoid freeze/thaw cycles.
<b>Ship</b>	Wet ice

# 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.

## Keywords

PIK3C3; phosphatidylinositol 3-kinase, catalytic subunit type 3; VPS34; hVps34; phosphatidylinositol 3-kinase catalytic subunit type 3; PI3K type 3; PI3-kinase type 3; PtdIns-3-kinase type 3; phosphoinositide-3-kinase, class 3; phosphatidylinositol 3-kinase p100 subunit;