G-Biosciences Image not found or type unknown

Immunotag™ P3C2A Polyclonal Antibody

Antibody Specification

Catalog No.	ITN1839
Product Description	Immunotag™ P3C2A Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	P3C2A
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	WB 1:500-2000 ELISA 1:5000-20000
Concentration	1 mg/ml
Reactive Species	Human,Mouse
Host Species	Rabbit
Immunogen	Synthesized peptide derived from part region of human protein
Specificity	P3C2A Polyclonal Antibody detects endogenous levels of protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Gene Name	PIK3C2A
Accession No.	O00443 Q61194

Antibody Specification

Description	phosphatidylinositol-4-phosphate 3-kinase catalytic subunit type 2 alpha(PIK3C2A) Homo sapiens The protein encoded by this gene belongs to the phosphoinositide 3-kinase (PI3K) family. PI3-kinases play roles in signaling pathways involved in cell proliferation, oncogenic transformation, cell survival, cell migration, and intracellular protein trafficking. This protein contains a lipid kinase catalytic domain as well as a C-terminal C2 domain, a characteristic of class II PI3-kinases. C2 domains act as calcium-dependent phospholipid binding motifs that mediate translocation of proteins to membranes, and may also mediate protein-protein interactions. The PI3-kinase activity of this protein is not sensitive to nanomolar levels of the inhibitor wortmanin. This protein was shown to be able to be activated by insulin and may be involved in integrin-dependent signaling. [provided by RefSeq, Jul 2008],
Cell Pathway/ Category	Inositol phosphate metabolism,Phosphatidylinositol signaling system,
Protein Expression	Lung,
Subcellular Localization	intracellular,nucleus,cytoplasm,Golgi apparatus,cytosol,plasma membrane,phosphatidylinositol 3-kinase complex,membrane,clathrin-coated vesicle,vesicle,extracellular exosome,
Protein Function	catalytic activity:ATP + 1-phosphatidyl-1D-myo-inositol 4-phosphate = ADP + 1-phosphatidyl-1D-myo-inositol 3,4-bisphosphate.,cofactor:Calcium or magnesium. Manganese cannot be used.,enzyme regulation:Activated by insulin (By similarity). Only slightly inhibited by wortmannin and LY294002. Activated by clathrin.,function:Phosphorylates PtdIns, PtdIns4P and PtdIns(4,5)P2. May play a role in clathrin-coated endocytic vesicle formation and EGF signaling cascade. May be involved in mitosis and UV-induced damage response. May be a downstream effector in insulin signaling cascade.,PTM:Phosphorylated upon insulin stimulation; which may lead to enzyme activation (By similarity). Phosphorylated on Ser-259 during mitosis and upon UV irradiation; which does not change enzymatic activity but leads to proteasomal degradation. Ser-259 phosphorylation may be mediated by CDC2 or JNK, depending on the physiological state of the cell.,similarity:Belongs to the PI3/PI4-kinase family.,similarity:Contains 1 C2 domain.,similarity:Contains 1 PI3K/PI4K domain.,similarity:Contains 1 PX (phox homology) domain.,subcellular location:According to PubMed:10766823 and PubMed:11239472 it is found in the cell membrane, the Golgi apparatus and in clathrin-coated vesicles. According to PubMed:17038310 it inserts preferentially into membranes containing PtdIns(4,5)P2. According to PubMed:11606566 it is nuclear and cytoplasmic. Associated with RNA-containing structures. According to PubMed:14563213 it is mainly cytoplasmic.,subunit:Part of a complex with ERBB2 and EGFR. Interacts with clathrin trimers.,tissue specificity:Expressed in columnar and transitional epithelia, mononuclear cells, smooth muscle cells, and endothelial cells lining capillaries and small venules (at protein level). Ubiquitously expressed, with highest levels in heart, placenta and ovary, and lowest levels in the kidney.,
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