

PKCζ(Phospho-Thr410) Conjugated Antibody

Catalog No: #C11314



Package Size: #C11314-AF350 100ul #C11314-AF405 100ul #C11314-AF488 100ul
 #C11314-AF555 100ul #C11314-AF594 100ul #C11314-AF647 100ul
 #C11314-AF680 100ul #C11314-AF750 100ul #C11314-Biotin 100ul

Orders: order@signalwayantibody.com
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Description

| | |
|-----------------------|--|
| Product Name | PKCζ(Phospho-Thr410) Conjugated Antibody |
| Host Species | Rabbit |
| Clonality | Polyclonal |
| Species Reactivity | Hu Ms Rt |
| Specificity | The antibody detects endogenous level of PKCζ only when phosphorylated at threonine 410. |
| Immunogen Description | Peptide sequence around phosphorylation site of threonine 410(T-S-T(p)-F-C) derived from Human PKCζ. |
| Conjugates | Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750 |
| Other Names | PKC2;PKC-ZETA |
| Accession No. | Swiss-Prot#:Q05513NCBI Gene ID:5590NCBI mRNA#:NM_001033581.1NCBI Protein#:NP_001028753.1 |
| Uniprot | Q05513 |
| GeneID | 5590; |
| Excitation Emission | AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm |
| Calculated MW | 78 |
| Formulation | 0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide |
| Storage | Store at 4°C in dark for 6 months |

Application Details

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250

AF405 conjugated: most applications: 1: 50 - 1: 250

AF488 conjugated: most applications: 1: 50 - 1: 250

AF555 conjugated: most applications: 1: 50 - 1: 250

AF594 conjugated: most applications: 1: 50 - 1: 250

AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250

AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

Product Description

Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.

Background

Calcium- and diacylglycerol-independent serine/threonine-protein kinase that functions in phosphatidylinositol 3-kinase (PI3K) pathway and mitogen-activated protein (MAP) kinase cascade, and is involved in NF-kappa-B activation, mitogenic signaling, cell proliferation, cell polarity, inflammatory response and maintenance of long-term potentiation (LTP). Upon lipopolysaccharide (LPS) treatment in macrophages, or following mitogenic stimuli, functions downstream of PI3K to activate MAP2K1/MEK1-MAPK1/ERK2 signaling cascade independently of RAF1 activation. Required for insulin-dependent activation of AKT3, but may function as an adapter rather than a direct activator. Upon insulin treatment may act as a downstream effector of PI3K and contribute to the activation of translocation of the glucose transporter SLC2A4/GLUT4 and subsequent glucose transport in adipocytes. In EGF-induced cells, binds and activates MAP2K5/MEK5-MAPK7/ERK5 independently of its kinase activity and can activate JUN promoter through MEF2C. Through binding with SQSTM1/p62, functions in interleukin-1 signaling and activation of NF-kappa-B with the specific adapters RIPK1 and TRAF6. Participates in TNF-dependent transactivation of NF-kappa-B by phosphorylating and activating IKBKB kinase, which in turn leads to the degradation of NF-kappa-B inhibitors. In migrating astrocytes, forms a cytoplasmic complex with PARD6A and is recruited by CDC42 to function in the establishment of cell polarity along with the microtubule motor and dynein. In association with FEZ1, stimulates neuronal differentiation in PC12 cells. In inflammatory response, is required for the T-helper 2 (Th2) differentiation process, including interleukins production, efficient activation of JAK1 and the subsequent phosphorylation and nuclear translocation of STAT6. May be involved in development of allergic airway inflammation (asthma), a process dependent on Th2 immune response. In NF-kappa-B-mediated inflammatory response, can relieve the SETD6-dependent repression of NF-kappa-B target genes by phosphorylating the RELA subunit at 'Ser-311'. Is necessary and sufficient for LTP maintenance in hippocampal CA1 pyramidal cells.

Note: This product is for in vitro research use only