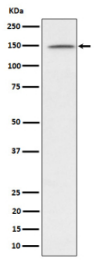
Phospho-Phospholipase C gamma 1 (pTyr1253) Antibody / PLCG1 [clone 32P05] (FY12272)

Catalog No.	Formulation	Size
FY12272	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	32P05
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	P19174
Applications	Western Blot : 1:500-1:2000
Limitations	This Phospho-Phospholipase C gamma 1 (pTyr1253) antibody is available for research use only.



Western blot analysis of phospho-Phospholipase C gamma 1/PLC-gamma-1 (pY1253) expression in Jurkat treated with Pervanadate lysate, using Phospho-Phospholipase C gamma 1 (pTyr1253) antibody.

Description

Phospho-Phospholipase C gamma 1 (pTyr1253) antibody targets phospholipase C gamma 1 (PLCG1) when phosphorylated at tyrosine 1253. PLCG1 is an essential enzyme in intracellular signal transduction, catalyzing the

hydrolysis of phosphatidylinositol 4,5-bisphosphate into diacylglycerol and inositol 1,4,5-trisphosphate. These second messengers trigger activation of protein kinase C and mobilization of intracellular calcium, respectively, initiating diverse downstream cellular responses.

Phosphorylation of PLCG1 at tyrosine 1253 is mediated by receptor tyrosine kinases and non-receptor tyrosine kinases. This phosphorylation event enhances catalytic activity and contributes to cell proliferation, differentiation, migration, and survival. Dysregulation of PLCG1 phosphorylation is implicated in oncogenesis, autoimmune disease, and vascular disorders.

Phospho-Phospholipase C gamma 1 (pTyr1253) antibody provides precise detection of the phosphorylated form, enabling researchers to evaluate signaling activation downstream of growth factor receptors such as EGFR, PDGFR, and VEGFR. It is commonly applied in studies involving cancer biology, immune receptor signaling, and angiogenesis.

This antibody is highly suitable for methods such as western blot, immunohistochemistry, immunofluorescence, and flow cytometry. By differentiating phosphorylated PLCG1 from total protein levels, it provides insight into dynamic cellular signaling events.

PLCG1 phosphorylation is especially important in cancer biology, where hyperactivation of growth factor signaling drives uncontrolled proliferation. Monitoring tyrosine 1253 phosphorylation provides mechanistic understanding of oncogenic transformation and therapeutic responses to kinase inhibitors. In immunology, PLCG1 phosphorylation regulates antigen receptor signaling, impacting T cell and B cell responses.

Phospho-Phospholipase C gamma 1 (pTyr1253) antibody from NSJ Bioreagents is a valuable reagent for researchers studying tyrosine kinase signaling, cell growth regulation, and immune function. Its phospho-specific recognition ensures accurate assessment of pathway activation in health and disease.

Application Notes

Optimal dilution of the Phospho-Phospholipase C gamma 1 (pTyr1253) antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human phospho-Phospholipase C gamma 1/PLC-gamma-1 (pY1253) was used as the immunogen for the Phospho-Phospholipase C gamma 1 (pTyr1253) antibody.

Storage

Store the Phospho-Phospholipase C gamma 1 (pTyr1253) antibody at -20oC.

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