Phospho-PDGF Receptor beta (pTyr1021) Antibody / CD140b [clone 32P59] (FY12754)

Catalog No.	Formulation	Size
FY12754	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	Mouse
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	32P59
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	P09619
Applications	Western blot: 1:500-1:2000
Limitations	This Phospho-PDGF Receptor beta (pTyr1021) antibody is available for research use only.

Description

Phospho-PDGF Receptor beta (pTyr1021) antibody detects platelet derived growth factor receptor beta when phosphorylated at tyrosine 1021. PDGFR beta, encoded by the PDGFRB gene, is also referred to as CD140b and PDGFR2. It is a receptor tyrosine kinase expressed on mesenchymal cells, smooth muscle, and pericytes. Upon ligand binding, PDGFR beta dimerizes and undergoes autophosphorylation at multiple tyrosines, including Tyr1021, which serves as a binding site for PLC gamma and other signaling proteins. This event is critical for downstream pathways regulating proliferation, migration, and angiogenesis.

Phospho-PDGF Receptor beta (pTyr1021) antibody is widely applied in cancer research, vascular biology, and fibrosis studies. By detecting phosphorylation at Tyr1021, researchers can evaluate receptor activation and downstream signaling status in diverse contexts. This site specific phosphorylation links PDGFR beta to phosphoinositide hydrolysis, calcium

mobilization, and mitogenic signaling.

Western blot assays distinguish phosphorylated PDGFR beta from unphosphorylated receptor, immunohistochemistry maps receptor activation in tumor vasculature and fibrotic tissues, and immunofluorescence highlights receptor localization at the plasma membrane. These assays provide direct evidence of receptor signaling in situ.

Dysregulation of PDGFR beta signaling contributes to cancers, vascular malformations, and fibrotic disease. Activating mutations and gene fusions involving PDGFRB drive leukemias and solid tumors. Excessive phosphorylation promotes pathological vessel growth and fibrosis. Phospho-PDGF Receptor beta (pTyr1021) antibody supports mechanistic studies and translational research into targeted therapies such as tyrosine kinase inhibitors. Measuring Tyr1021 phosphorylation also provides pharmacodynamic biomarkers for drug development.

Phospho-PDGF Receptor beta (pTyr1021) antibody from NSJ Bioreagents ensures strong specificity for detecting this critical phosphorylation event. Its validated performance across assays supports reliable evaluation of receptor tyrosine kinase signaling.

Application Notes

Optimal dilution of the Phospho-PDGF Receptor beta (pTyr1021) antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human Phospho-PDGF Receptor beta / CD140b (Y1021) was used as the immunogen for the Phospho-PDGF Receptor beta (pTyr1021) antibody.

Storage

Store the Phospho-PDGF Receptor beta (pTyr1021) antibody at -20oC.

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