Human/Mouse Phospho-PDGF Rβ (Y751) Antibody

Recombinant Monoclonal Rabbit IgG Clone # 1210B
Catalog Number: MAB9027

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human and mouse PDGF Rβ when phosphorylated at Y751 in Western blots.
Source	Recombinant Monoclonal Rabbit IgG Clone # 1210B
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Phosphopeptide containing the human PDGF Rβ(Y751) site Accession # P09619
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

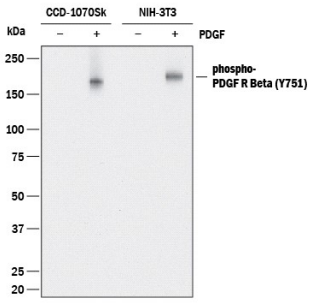
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	See Below
Immunocytochemistry	5-25 µg/mL	See Below
Simple Western	1 µg/mL	See Below

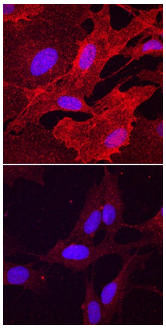
DATA

Western Blot



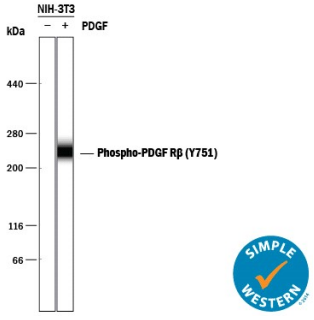
Detection of Human and Mouse Phospho-PDGF Rβ (Y751) by Western Blot. Western blot shows lysates of CCD-1070Sk human foreskin fibroblast cell line and NIH-3T3 mouse embryonic fibroblast cell line untreated (-) or treated (+) with 100 ng/mL Recombinant Human PDGF-BB (Catalog # 220-BB) for 20 minutes. PVDF membrane was probed with 0.1 µg/mL of Rabbit Anti-Human/Mouse Phospho-PDGF Rβ (Y751) Monoclonal Antibody (Catalog # MAB9027) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for PDGF Rβ at approximately 190 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



Phospho-PDGF Rβ (Y751) in BJ Human Cell Line. PDGF Rβ phosphorylated at Y751 was detected in immersion fixed BJ human skin fibroblast cell line stimulated (top panel), and unstimulated (bottom panel), with Recombinant Human PDGF-BB (Catalog # 220-BB) using Rabbit Anti-Human/Mouse Phospho-PDGF Rβ (Y751) Monoclonal Antibody (Catalog # MAB9027) at 5 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rabbit IgG Secondary Antibody (red; Catalog # NL004) and counterstained with DAPI (blue). Specific staining was localized to cell surfaces and cytoplasm. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

Simple Western



Detection of Mouse Phospho-PDGF Rβ (Y751) by Simple Western™. Simple Western lane view shows lysates of NIH-3T3 mouse embryonic fibroblast cell line untreated (-) or treated (+) with 100 ng/mL Recombinant Human PDGF-BB (Catalog # 220-BB) for 20 minutes, loaded at 0.2 mg/mL. A specific band was detected for PDGF Rβ at approximately 240 kDa (as indicated) using 1 µg/mL of Rabbit Anti-Human/Mouse Phospho-PDGF Rβ (Y751) Monoclonal Antibody (Catalog # MAB9027). This experiment was conducted under reducing conditions and using the 66-440 kDa separation system.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449

Human/Mouse Phospho-PDGF Rβ (Y751) Antibody

Recombinant Monoclonal Rabbit IgG Clone # 1210B
Catalog Number: MAB9027

BACKGROUND

PDGF is a major serum mitogen that can exist as a homo or hetero-dimeric protein consisting of disulfide-linked PDGF-A and PDGF-B chains. The PDGF-AA, PDGF-BB and PDGF-AB isoforms have been shown to bind to two distinct cell surface PDGF receptors with different affinities. Where as PDGF Rα binds all three PDGF isoforms with high affinity, PDGF Rβ binds PDGF-BB only with high-affinity. Both PDGF Rα and PDGF Rβ are members of the class III subfamily of receptor tyrosine kinases (RTK) that also includes the receptors for M-CSF, SCF and Flt3 ligand. All class III RTKs are characterized by the presence of five immunoglobulin-like domains in their extracellular region and a split kinase domain in their intracellular region. PDGF binding induces receptor homo-and hetero-dimerization and signal transduction. The expression of the α and β receptors is independently regulated in various cell types. Recombinant soluble PDGF Rβ binds PDGF with high affinity and is potent PDGF antagonist.

References:

1. Heldin, C.H. and L. Claesson-Welsh (1994) in *Guidebook to Cytokines and Their Receptors*, Nicola, N.A. ed. Oxford University Press, New York, p. 202.

Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 **Canada** TEL 855 668 8722 **China** TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449