

# Human Phospho-PDGF Rβ (Y1021) Antibody

Antigen Affinity-purified Polyclonal Rabbit IgG Catalog Number: AF2316

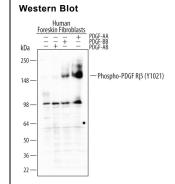
DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects human PDGF Rβ when phosphorylated at Y1021 in Western blots.		
Source	Polyclonal Rabbit IgG		
Purification	Antigen Affinity-purified		
Immunogen	Phosphopeptide containing human PDGF Rβ Y1021 site		
Formulation	Lyophilized from a 0.2 µm filtered 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	0.5 μg/mL	See Below

#### DATA



Detection of Human Phospho-PDGF Rβ (Y1021) by Western Blot. Western blot shows lvsates of human foreskin fibroblast untreated (-) or treated (+) with 100 ng/mL Recombinant Human PDGF-AA, PDGF-AB, and PDGF-BB (Catalog # 221-AA, 222-AB, and 220-BB, respectively) for 10 minutes. PVDF membrane was probed with 0.5 µg/mL of Rabbit Anti-Human Phospho-PDGF Rβ (Y1021) Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2316), followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for Phospho-PDGF Rβ (Y1021) at approximately 185 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

# PREPARATION AND STORAGE

Reconstitution Reconstitute at 0.2 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  $^\circ$ C

# Stability & Storage Use a ma

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

# BACKGROUNI

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 R $\alpha$  binds all three PDGF isoforms with high affinity, PDGF R $\beta$  binds PDGF-BB only with high-affinity. Both PDGF R $\alpha$  and PDGF R $\beta$  are members of the class III subfamily of receptor tyrosine kinases (RTK) that also includes the receptors for M-CSF, SCF and Fl13 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  $\alpha$  and  $\beta$  receptors is independently regulated in various cell types. Recombinant soluble PDGF R $\beta$  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.

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