p-PDGFR-β (Tyr 1021)-R: sc-12909-R

**BACKGROUND**
Platelet derived growth factor (PDGF) is a mitogen for mesenchyme- and glia-derived cells. PDGF consists of two chains, A and B, which dimerize to form functionally distinct isoforms, PDGF-AA, PDGF-AB, and PDGF-BB. These three isoforms bind with different affinities to two receptor types, α and β, which are endowed with protein tyrosine kinase domains and undergo either homo- or heterodimerization as a consequence of ligand binding. Ligand stimulation of PDGFR-β leads to autophosphorylation at Tyr 857, which is the major auto-phosphorylation site, and Tyr751, which is the major site. Autophosphorylation of Tyr751, which lies in the kinase insert region, or heterodimerization as a consequence of ligand binding. Ligand stimulation of PDGFR-α leads to autophosphorylation at Tyr1021, which lies in the kinase insert region, which is the major auto-phosphorylation site.

**CHROMOSOMAL LOCATION**
Genetic locus: PDGFRB (human) mapping to 5q32; Pdgfrb (mouse) mapping to 18 E1.

**SOURCE**
p-PDGFR-β (Tyr 1021)-R is a rabbit polyclonal antibody raised against a short amino acid sequence containing Tyr 1021 phosphorylated PDGFR-β of human origin.

**PRODUCT**
Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-12909 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**
p-PDGFR-β (Tyr 1021)-R is recommended for detection of Tyr 1021 phosphorylated PDGFR-β of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

p-PDGFR-β (Tyr 1021)-R is also recommended for detection of correspondingly phosphorylated PDGFR-β in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for PDGFR-β siRNA (h): sc-29442, PDGFR-β siRNA (m): sc-36200, PDGFR-β shRNA Plasmid (h): sc-29442-SH, PDGFR-β shRNA Plasmid (m): sc-36200-SH, PDGFR-β shRNA (h) Lentiviral Particles: sc-29442-V and PDGFR-β shRNA (m) Lentiviral Particles: sc-36200-V.

Molecular Weight of p-PDGFR-β: 190 kDa.

Positive Controls: CCD-1064Sk + PDGF cell lysate: sc-2264, Hep G2 + TGFβ cell lysate: sc-24702 or NIH/3T3 whole cell lysate: sc-2210.

**STORAGE**
Store at 4°C, **“DO NOT FREEZE”**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**
Western blot analysis of PDGFR-β phosphorylation in non-transfected: sc-117752 (A,D), untransfected human PDGFR-β transfected: sc-159386 (B,E) and lambda protein phosphatase (sc-200312A) treated human PDGFR-β transfected: sc-159386 (C,F) 293T whole cell lysates. Antibodies tested include p-PDGFR-β (Tyr 1021): sc-12909-R (A,B,C) and PDGFR-β (1H4) sc-80991 (D,E,F).

**SELECT PRODUCT CITATIONS**

**RESEARCH USE**
For research use only, not for use in diagnostic procedures.