

p-PDGFR- β (Tyr 770): sc-17175

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 autophosphorylation site, and Tyr 751, which is the major *in vitro* phosphorylation site. Autophosphorylation of Tyr 751, which lies in the kinase insert region, is required for binding of phosphatidylinositol-3 kinase to the receptor. These auto-phosphorylation events largely contribute to signal transduction through the PDGF receptor.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: *Pdgfrb* (mouse) mapping to 18 E1.

SOURCE

p-PDGFR- β (Tyr 770) is available as either goat (sc-17175) or rabbit (sc-17175-R) polyclonal affinity purified antibody raised against a short amino acid sequence containing phosphorylated Tyr 770 of PDGFR- β of mouse origin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-17175 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

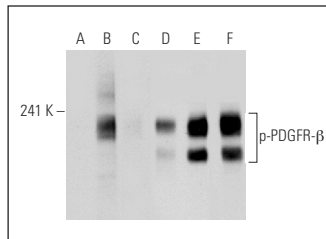
p-PDGFR- β (Tyr 770) is recommended for detection of Tyr 770 phosphorylated PDGFR- β of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

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

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

DATA



Western blot analysis of PDGFR- β phosphorylation in untreated (A, D), PDGF treated (B, E) and PDGF and lambda protein phosphatase treated (C, F) NIH/3T3 whole cell lysates. Antibodies tested include p-PDGFR- β (Tyr 770)-R: sc-17175-R (A, B, C) and PDGFR- β (11H4): sc-80991 (D, E, F).

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.