

PDGFR- β (958): sc-432

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, PDGFR- α and - β , which are endowed with protein tyrosine kinase domains. PDGFR- α can bind to both A and B subunits of PDGF, while PDGFR- β can only bind the B subunit. Ligand binding promotes either homo- or heterodimerization of the PDGF receptors in a specific manner. PDGF-AA induces the dimerization of two α receptors, PDGF-AB induces dimerization of $\alpha\alpha$ and $\alpha\beta$ and PDGF-BB induces the formation of three types of dimers, $\alpha\alpha$, $\alpha\beta$ and $\beta\beta$. Translocation of the PDGFR- β gene with the Tel gene is linked to chronic myelomonocytic leukemia (CMML), a myelodysplastic syndrome and demonstrates the oncogenic potential of the PDGF receptors.

CHROMOSOMAL LOCATION

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

SOURCE

PDGFR- β (958) is a rabbit polyclonal antibody raised against amino acids 958-1106 of PDGFR- β of human origin.

PRODUCT

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

PDGFR- β (958) is available conjugated to either phycoerythrin (sc-432 PE) or fluorescein (sc-432 FITC), 200 μ g/ml, for IF, IHC(P) and FCM.

APPLICATIONS

PDGFR- β (958) is recommended for detection of PDGF receptor type β of mouse, rat and human 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), flow cytometry (1 μ g per 1×10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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 PDGFR- β : 180-190 kDa.

Positive Controls: PDGFR- β (h2): 293T Lysate: sc-159386, NIH/3T3 nuclear extract: sc-2138 or CCD-1064Sk cell lysate: sc-2263.

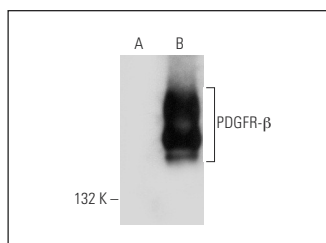
STORAGE

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

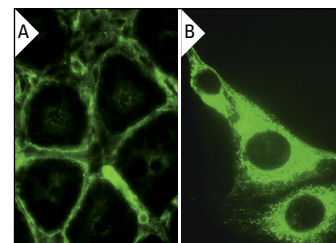
RESEARCH USE

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

DATA



PDGFR- β (958): sc-432. Western blot analysis of PDGFR- β expression in non-transfected: sc-117752 (A) and human PDGFR- β transfected: sc-159386 (B) 293T whole cell lysates.



PDGFR- β (958): sc-432. Immunofluorescence staining of normal mouse intestine frozen section showing membrane staining (A). Cytoplasmic immunofluorescence staining of methanol-fixed NIH/3T3 fibroblasts (B).

SELECT PRODUCT CITATIONS

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Try **PDGFR- β (D-6): sc-374573** or **PDGFR- β (11H4): sc-80991**, our highly recommended monoclonal alternatives to PDGFR- β (958). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **PDGFR- β (D-6): sc-374573**.