

PDGFRL (N-18): sc-98071

BACKGROUND

PDGFRL (platelet-derived growth factor receptor-like protein), also known as PDGF receptor β -like tumor suppressor, is a 375 amino acid secreted protein that bears significant sequence similarity to the extracellular domain of PDGFR- β . PDGFRL contains two Ig-like C2-type domains, through which it potentially binds ligands. The gene encoding PDGFRL is localized to a region of chromosome 18 that is frequently mutated in colorectal cancers (CRC), hepatocellular carcinomas (HCC) and nonsmall cell lung cancers (NSCLC). The PDGFRL gene has a somatic mutation at codon 23 in CRCs, a 2 base pair deletion at codon 175 in HCCs and a somatic rearrangement in DNA in NSCLCs. Significantly, PDGFRL is preferentially expressed in normal liver, lung and colon. It has been suggested that PDGFRL binds to and alters the activity of the potent mitogen PDGFR. It is possibly through this mechanism that PDGFRL functions as a potential tumor suppressor.

REFERENCES

1. Fujiwara, Y., et al. 1994. A 3-Mb physical map of the chromosome region 8p21.3-p22, including a 600-kb region commonly deleted in human hepatocellular carcinoma, colorectal cancer, and non-small cell lung cancer. *Genes Chromosomes Cancer* 10: 7-14.
2. Fujiwara, Y., et al. 1995. Isolation of a candidate tumor suppressor gene on chromosome 8p21.3-p22 that is homologous to an extracellular domain of the PDGF receptor β gene. *Oncogene* 10: 891-895.
3. Online Mendelian Inheritance in Man, OMIM™. 2000. Johns Hopkins University, Baltimore, MD. MIM Number: 604584. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Bo, H., et al. 2004. Effect of ionizing irradiation on human esophageal cancer cell lines by cDNA microarray gene expression analysis. *J. Nippon Med. Sch.* 71: 172-180.

CHROMOSOMAL LOCATION

Genetic locus: PDGFRL (human) mapping to 8p22; Pdgfrl (mouse) mapping to 8 A4.

SOURCE

PDGFRL (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of PDGFRL 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.

Blocking peptide available for competition studies, sc-98071 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

PDGFRL (N-18) is recommended for detection of PDGFRL 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PDGFRL (N-18) is also recommended for detection of PDGFRL in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PDGFRL siRNA (h): sc-77541, PDGFRL siRNA (m): sc-152134, PDGFRL shRNA Plasmid (h): sc-77541-SH, PDGFRL shRNA Plasmid (m): sc-152134-SH, PDGFRL shRNA (h) Lentiviral Particles: sc-77541-V and PDGFRL shRNA (m) Lentiviral Particles: sc-152134-V.

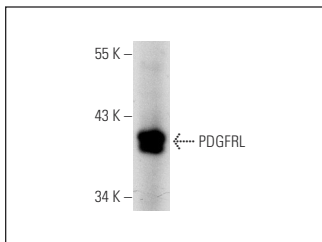
Molecular Weight of PDGFRL: 42 kDa.

Positive Controls: mouse liver extract: sc-2256 or SK-MEL-28 cell lysate: sc-2236.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



PDGFRL (N-18): sc-98071. Western blot analysis of PDGFRL expression in mouse liver tissue extract.

RESEARCH USE

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

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Try **PDGFRL (F-2): sc-393355**, our highly recommended monoclonal alternative to PDGFRL (N-18).