

# PDGFRL (F-2): sc-393355

## BACKGROUND

PDGFRL (platelet-derived growth factor receptor-like protein), also known as PDGF receptor  $\beta$ -like tumor suppressor, is a 375 amino acid secreted protein that bears significant sequence similarity to the extracellular domain of PDGFR- $\beta$ . 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 two 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  $\beta$  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/>

## CHROMOSOMAL LOCATION

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

## SOURCE

PDGFRL (F-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 23-54 near the N-terminus of PDGFRL of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PDGFRL (F-2) is available conjugated to agarose (sc-393355 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393355 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393355 PE), fluorescein (sc-393355 FITC), Alexa Fluor® 488 (sc-393355 AF488), Alexa Fluor® 546 (sc-393355 AF546), Alexa Fluor® 594 (sc-393355 AF594) or Alexa Fluor® 647 (sc-393355 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393355 AF680) or Alexa Fluor® 790 (sc-393355 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393355 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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## APPLICATIONS

PDGFRL (F-2) is recommended for detection of PDGFRL of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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 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.

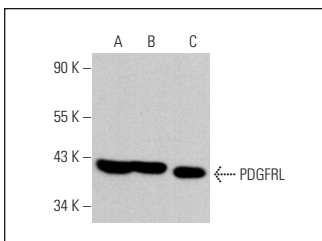
Molecular Weight of PDGFRL: 42 kDa.

Positive Controls: SK-MEL-28 cell lysate: sc-2236, MCF7 whole cell lysate: sc-2206 or HeLa whole cell lysate: sc-2200.

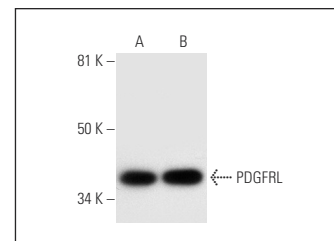
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



PDGFRL (F-2): sc-393355. Western blot analysis of PDGFRL expression in HeLa (A), MCF7 (B) and A549 (C) whole cell lysates.



PDGFRL (F-2): sc-393355. Western blot analysis of PDGFRL expression in SK-MEL-28 (A) and HeLa (B) whole cell lysates.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.