**BACKGROUND**

Platelet-derived growth factor (PDGF) refers to a family of disulphide-bonded dimeric isoforms that are important for growth and survival, and which function in several types of connective tissue cell. PDGF, which is a major mitogen for vascular smooth muscle cells and is implicated in the pathogenesis of arteriosclerosis, is composed of dimers of PDGF-A and PDGF-B polypeptide chains encoded by different genes. PDGF-C (also designated spinal cord-derived growth factor, SCDGF or fallotelin) is a functional analog of PDGF-A that requires proteolytic activation. PDGF-A and PDGF-C selectively activate PDGFR-α, whereas PDGF-B activates both PDGFR-α and PDGFR-β. PDGF-C expression in the arterial wall and cultured vascular cells suggests that it can transduce proliferation/migration signals to pericytes and smooth muscle cells. Additionally, PDGF-C is a target of EWS/ETS transcriptional deregulation and this transcriptional deregulation is specific to EWS/FLI.

**CHROMOSOMAL LOCATION**

Genetic locus: PDGFC (human) mapping to 4q32.1; Pdgfc (mouse) mapping to 3 E3.

**SOURCE**

PDGF-C (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PDGF-C 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-18228 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

PDGF-C (C-17) is recommended for detection of precursor and mature PDGF-C 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PDGF-C (C-17) is also recommended for detection of precursor and mature PDGF-C in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PDGF-C siRNA (h): sc-39707, PDGF-C siRNA (m): sc-39708, PDGF-C shRNA Plasmid (h): sc-39707-SH, PDGF-C shRNA Plasmid (m): sc-39708-SH, PDGF-C shRNA (h) Lentiviral Particles: sc-39707-V and PDGF-C shRNA (m) Lentiviral Particles: sc-39708-V.

Molecular Weight of PDGF-C isoforms: 46/30 kDa.

Positive Controls: C3H/10T1/2 cell lysate: sc-3801 or mouse uterus extract: sc-364254.

**STORAGE**

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

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

Try PDGF-C (KJ-13): sc-80290, our highly recommended monoclonal alternative to PDGF-C (C-17).