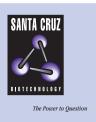
# SANTA CRUZ BIOTECHNOLOGY, INC.

# Plfr (E-20): sc-103832



# BACKGROUND

Plfr (Proliferin-related protein), also known as PRP, PLF-RP or Prolactin-7D1, is a glycoprotein belonging to the somatotropin/prolactin family of growth hormones. Plfr shares significant homology with all members of this family. Plfr is a potent placental antiangiogenic hormone secreted during mid to late gestation (peaking at day 12) in response to several angiogenic factors. In contrast to Proliferin, a promoter of placental neovascularization, Plfr may function to limit endothelial invasiveness and regulate the cessation of placental neovascularization. Plfr is produced by murine giant cells and spongiotrophoblasts. This localization suggests that Plfr may act to generate a barrier zone, preventing the criss-crossing of maternal blood vessels extending from the uterus and fetal vessels extending from the placenta. Although a human Plfr has not been characterized, the mouse hormone can induce antiangiogenic effects on human endothelial cells. This suggests that the Plfr signaling pathway is conserved between mouse and human.

# REFERENCES

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#### **STORAGE**

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

#### CHROMOSOMAL LOCATION

Genetic locus: Prl7d1 (mouse) mapping to 13 A3.1.

# SOURCE

Plfr (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Plfr of mouse origin.

#### PRODUCT

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

Blocking peptide available for competition studies, sc-103832 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

Plfr (E-20) is recommended for detection of Plfr of mouse 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Plfr siRNA (m): sc-106420, Plfr shRNA Plasmid (m): sc-106420-SH and Plfr shRNA (m) Lentiviral Particles: sc-106420-V.

Molecular Weight of Plfr: 24 kDa.

#### **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.

#### **RESEARCH USE**

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

# PROTOCOLS

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