**BACKGROUND**

Prostaglandin receptors are integral membrane proteins that bind prostaglandins with high affinity. This triggers changes in the cell which influence cell behavior. Prostaglandin receptor subtypes are named according to their relative affinities for the endogenous prostaglandins. These include prostaglandin D2 (DP receptors), prostaglandin E2 (EP1, EP2 and EP3 receptors), prostaglandin F2α (FP receptors) and prostacyclin (IP receptors). Prostaglandin F2α receptor (PGF2αR), also designated prostanoid FP receptor is an integral membrane protein. It acts as a receptor for prostaglandin F2α. The activity of PGF2αR is mediated by G proteins that activate phosphatidylinositol-calcium second messenger system. In the corpus luteum, PGF2αR is involved in luteolysis initiation.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: PTGFR (human) mapping to 1p31.1; Ptgfr (mouse) mapping to 3 H3.

**SOURCE**

PGF2αR (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of PGF2αR 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-33364 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

PGF2αR (K-14) is recommended for detection of PGF2αR of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:150-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PGF2αR siRNA (h): sc-44987, PGF2αR siRNA (m): sc-44988, PGF2αR shRNA Plasmid (h): sc-44987-SH, PGF2αR shRNA Plasmid (m): sc-44988-SH, PGF2αR shRNA (h) Lentiviral Particles: sc-44987-V and PGF2αR shRNA (m) Lentiviral Particles: sc-44988-V.

Positive Controls: HeLa whole cell lysate: sc-2200.

**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: 1:2000-1:500), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-24941. 2) 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.

**SELECT PRODUCT CITATIONS**


**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 or our catalog for detailed protocols and support products.