

# IP Receptor (T-14): sc-34042

## BACKGROUND

Cyclooxygenases metabolize arachidonate to five primary prostanoids: PGE<sub>2</sub>, PGF<sub>2</sub>α, PGI<sub>2</sub>, TXA<sub>2</sub> and PGD<sub>2</sub>. These lipid mediators interact with specific members of G protein-coupled prostanoid receptors, designated EP, FP, IP, TP and DP, respectively. The IP Receptor binds prostacyclin, PGI<sub>2</sub>, the main prostanoid synthesized by vascular tissues. First discovered in 1976, prostacyclin is involved in platelet aggregation inhibition, vasodilatation and cytoprotection, and either prostacyclin or its analogs are used in the treatment of hypertension. Upon binding to the IP Receptor, prostacyclin activates adenylate cyclase primarily through the Gas protein. The gene encoding the human IP Receptor is located on chromosome 19. It is expressed as a glycosylated and phosphorylated protein, which is abundantly expressed in vascular tissues such as aorta, lung, atrium and ventricle, as well as in kidney, thymus, spleen and neurons.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: PTGIR (human) mapping to 19q13.32.

## SOURCE

IP Receptor (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of IP Receptor 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-34042 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

IP Receptor (T-14) is recommended for detection of IP Receptor of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

IP Receptor (T-14) is also recommended for detection of IP Receptor in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for IP Receptor siRNA (h): sc-40175, IP Receptor shRNA Plasmid (h): sc-40175-SH and IP Receptor shRNA (h) Lentiviral Particles: sc-40175-V.

Molecular Weight of IP Receptor: 42 kDa.

Positive Controls: A549 cell lysate: sc-2413.

## 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) 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.

## 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) or our catalog for detailed protocols and support products.

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Satisfaction  
Guaranteed

Try **IP Receptor (B-6): sc-515139** or **IP Receptor (B-3): sc-365268**, our highly recommended monoclonal alternatives to IP Receptor (T-14).