



## PILR- $\alpha$ / $\beta$ (G-14): sc-109848

### BACKGROUND

Cell signaling pathways are mediated by the interaction between activating and inhibiting processes which are generally regulated by an activating/inhibiting receptor pair. PILR- $\beta$  (paired immunoglobulin-like type 2 receptor  $\beta$ ), also known as FDFACT, is a 227 amino acid single-pass type I membrane protein that contains one Ig-like V-type (immunoglobulin-like) domain. Existing as multiple alternatively spliced isoforms, PILR- $\beta$  acts as the non-ITIM-bearing activating member of the PILR- $\alpha$ /PILR- $\beta$  receptor pair and functions to activate cell signaling cascades that involve adaptor molecules on the cell surface. The gene encoding both PILR- $\alpha$  and PILR- $\beta$  are in a tandem head-to-tail orientation on human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome.

### REFERENCES

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### RESEARCH USE

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

### CHROMOSOMAL LOCATION

Genetic locus: PILRA (human) mapping to 7q22.1, PILRB (human) mapping to 7q22.1.

### SOURCE

PILR- $\alpha$ / $\beta$  (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of PILR- $\beta$  of human 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-109848 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

PILR- $\alpha$ / $\beta$  (G-14) is recommended for detection of PILR- $\beta$  and PILR- $\alpha$  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).

Molecular Weight of PILR- $\alpha$ : 34 kDa.

Molecular Weight of PILR- $\beta$ : 25 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) 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.

### PROTOCOLS

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