

## PAF-R (C-20): sc-8742

### BACKGROUND

Platelet-activating factor (PAF) is a pro-inflammatory lipid mediator that activates many cell types including leukocytes, platelets and vascular endothelial cells in response to cutaneous inflammation. PAF signaling is primarily directed through binding to the G protein-coupled PAF-receptors (PAF-R) and results in signal transduction by various pathways that are regulated by phospholipase C, phospholipase A<sub>2</sub> and mitogen-activated protein kinases. Activation of PAF-R is associated with alterations in cell morphology, cytoskeletal remodeling and expression of inflammatory modulators, including cyclo-oxygenase-2, interleukin (IL)-6 and IL-8. Expression of PAF-R is upregulated by PAF and gut flora in intestinal epithelium. PAF-R transcription is downregulated by glucocorticoids as a result of eosinophil depletion, suggesting that PAF-R may play a role in both host defenses and inflammatory responses.

### REFERENCES

1. Nakamura, M., et al. 1991. Molecular cloning and expression of platelet-activating factor receptor from human leukocytes. *J. Biol. Chem.* 266: 20400-20405.
2. Kunz, D., et al. 1992. The human leukocyte platelet-activating factor receptor. cDNA cloning, cell surface expression, and construction of a novel epitope-bearing analog. *J. Biol. Chem.* 267: 9101-9106.
3. Muller, E., et al. 1993. Identification and functional characterization of platelet-activating factor receptors in human leukocyte populations using polyclonal anti-peptide antibody. *Proc. Natl. Acad. Sci. USA* 90: 5818-5822.
4. Predescu, D., et al. 1996. The vascular distribution of the platelet-activating factor receptor. *Eur. J. Cell Biol.* 69: 86-98.
5. Ahmed, A., et al. 1998. Localization, quantification, and activation of platelet-activating factor receptor in human endometrium during the menstrual cycle: PAF stimulates NO, VEGF, and FAKpp125. *FASEB J.* 12: 831-843.

### CHROMOSOMAL LOCATION

Genetic locus: PTAFR (human) mapping to 1p35.3.

### SOURCE

PAF-R (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of PAF-R 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-8742 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### 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.

### APPLICATIONS

PAF-R (C-20) is recommended for detection of PAF-R of 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).

Suitable for use as control antibody for PAF-R siRNA (h): sc-40165, PAF-R shRNA Plasmid (h): sc-40165-SH and PAF-R shRNA (h) Lentiviral Particles: sc-40165-V.

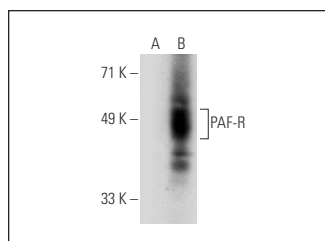
Molecular Weight of PAF-R: 45/67/116 kDa.

Positive Controls: PAF-R (h): 293T Lysate: sc-113346 or human platelet extract: sc-363773.

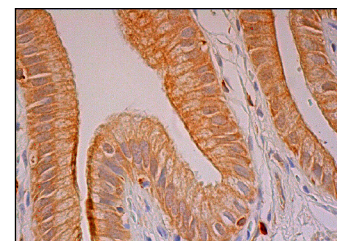
### RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

### DATA



PAF-R (C-20): sc-8742. Western blot analysis of PAF-R expression in non-transfected: sc-117752 (A) and human PAF-R transfected: sc-113346 (B) 293T whole cell lysates.



PAF-R (C-20): sc-8742. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing cytoplasmic and membrane staining of glandular cells.

### SELECT PRODUCT CITATIONS

1. Bayerl, C., et al. 2003. PAF-receptor in inflammatory versus non-inflammatory human epidermis, cell cultures and embryonal cells. *Inflamm. Res.* 52: 283-286.

### PROTOCOLS

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