

## FPR2 (H-150): sc-66898

### BACKGROUND

The N-formyl peptide receptor (FPR) family is comprised of three members, FPR, FPR like-1 (FPRL1, also designated lipoxin A4 receptor, FPRH1 and FPR2) and FPR like-2 (FPRL2), all of which are chemotactic G protein-coupled receptors that contain seven transmembrane domains. These receptors are found on the surface of phagocytic leukocytes, such as neutrophils and monocytes, and each family member contains specific residues, which are responsible for determining its ligand specificity. FPRL1 is a promiscuous receptor that binds to several ligands, including lipoxin A4, N-formyl-methionyl-leucyl-phenylalanine (fMLP), serum Amyloid A (SAA), prion peptide and the 42 amino acid form of  $\beta$ -Amyloid. Upon activation, FPRL1 induces migration and calcium mobilization in human monocytes and neutrophils and is involved in inflammatory and host defense responses. FPRL1 may mediate inflammation in prion and Alzheimer's diseases, which makes it a potential target for therapeutic agents.

### REFERENCES

- Shen, W., et al. 2000. Activation of the chemotactic peptide receptor FPRL1 in monocytes phosphorylates the chemokine receptor CCR5 and attenuates cell responses to selected chemokines. *Biochem. Biophys. Res. Commun.* 272: 276-283.
- Hu, J.Y., et al. 2001. Synthetic peptide MMK-1 is a highly specific chemotactic agonist for leukocyte FPRL1. *J. Leukoc. Biol.* 70: 155-161.
- Le, Y., et al. 2001. Pleiotropic roles of formyl peptide receptors. *Cytokine Growth Factor Rev.* 12: 91-105.
- Le, Y., et al. 2001. The neurotoxic prion peptide fragment PrP(106-126) is a chemotactic agonist for the G protein-coupled receptor formyl peptide receptor-like 1. *J. Immunol.* 166: 1448-1451.
- Christophe, T., et al. 2001. The synthetic peptide Trp-Lys-Tyr-Met-Val-Met-NH<sub>2</sub> specifically activates neutrophils through FPRL1/lipoxin A4 receptors and is an agonist for the orphan monocyte-expressed chemoattractant receptor FPRL2. *J. Biol. Chem.* 276: 21585-21593.
- Yang, D., et al. 2001. Differential regulation of formyl peptide receptor-like 1 expression during the differentiation of monocytes to dendritic cells and macrophages. *J. Immunol.* 166: 4092-4098.
- Le, Y., et al. 2001. Amyloid ( $\beta$ )42 activates a G protein-coupled chemoattractant receptor, FPR-like-1. *J. Neurosci.* 21: RC123.

### SOURCE

FPR2 (H-150) is a rabbit polyclonal antibody raised against amino acids 141-290 mapping within an internal region of FPR2 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.

### STORAGE

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

### APPLICATIONS

FPR2 (H-150) is recommended for detection of FPR2 and, to a lesser extent, other FPR family members of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

FPR2 (H-150) is also recommended for detection of FPR2 and, to a lesser extent, other FPR family members in additional species, including canine.

Molecular Weight of FPR2: 40 kDa.

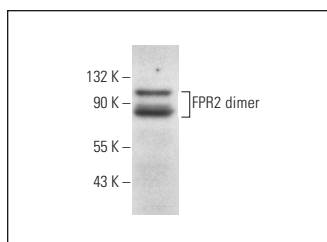
Molecular Weight of FPR2 dimer: 100 kDa.

Positive Controls: AML-193 whole cell lysate: sc-364182.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### DATA



FPR2 (H-150): sc-66898. Western blot analysis of FPR2 expression in AML-193 whole cell lysate.

### 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.



Try **FPR2 (GM1D6): sc-57141**, our highly recommended monoclonal alternative to FPR2 (H-150). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **FPR2 (GM1D6): sc-57141**.