

## FPR2 (M-73): sc-66901

### 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

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- Jesaitis, A.J., et al. 1993. Cytoskeletal regulation of chemotactic receptors: molecular complexation of N-formyl peptide receptors with G proteins and Actin. *Eur. J. Haematol.* 51: 288-293.
- Belisle, B., et al. 2000. N-Formyl peptide receptor ligation induces Rac-dependent Actin reorganization through  $G_{\beta\gamma}$  subunits and class Ia phosphoinositide 3-kinase. *J. Biol. Chem.* 275: 16225-16232.
- Mills, J.S., et al. 2000. Characterization of the binding site on the formyl peptide receptor using three receptor mutants and analogs of Met-Leu-Phe and Met-Met-Trp-Leu-Leu. *J. Biol. Chem.* 275: 39012-39017.
- Shen, W., et al. 2000. Downregulation of the chemokine receptor CCR5 by activation of chemotactic formyl peptide receptor in human monocytes. *Blood* 96: 2887-2894.
- He, R., et al. 2000. The synthetic peptide Trp-Lys-Tyr-Met-Val-D-Met is a potent chemotactic agonist for mouse formyl peptide receptor. *J. Immunol.* 165: 4598-4605.
- Walther, A., et al. 2000. A novel ligand of the formyl peptide receptor: Annexin I regulates neutrophil extravasation by interacting with the FPR. *Mol. Cell* 5: 831-840.

### SOURCE

FPR2 (M-73) is a rabbit polyclonal antibody raised against amino acids 208-280 mapping within an internal region of FPR2 of mouse origin.

### PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

### RESEARCH USE

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

### APPLICATIONS

FPR2 (M-73) is recommended for detection of FPR2 and, to a lesser extent, other FPR family members of mouse, rat and, to a lesser extent, 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).

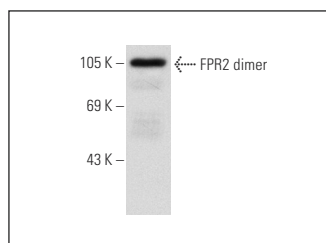
Molecular Weight of FPR2: 40 kDa.

Molecular Weight of FPR2 dimer: 100 kDa.

### 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 (M-73): sc-66901. Western blot analysis of FPR2 expression in 293T whole cell lysate.

### SELECT PRODUCT CITATIONS

- Zhao, Y., et al. 2015. Following OGD/R, annexin 1 nuclear translocation and subsequent induction of apoptosis in neurons are assisted by myosin IIA in a TRPM7 kinase-dependent manner. *Mol. Neurobiol.* 51: 729-742.

### STORAGE

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



Try **FPR2 (GM1D6): sc-57141**, our highly recommended monoclonal alternative to FPR2 (M-73). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **FPR2 (GM1D6): sc-57141**.