

## FPR2/3 (N-20)-R: sc-18191-R

### BACKGROUND

The N-formyl peptide receptor (FPR) family is comprised of three members, FPR, FPR2 (also designated lipoxin A4 receptor, FPRH1 and FPRL1) and FPR3 (also designated 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. FPR2 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, FPR2 induces migration and calcium mobilization in human monocytes and neutrophils and is involved in inflammatory and host defense responses. FPR2 may mediate inflammation in prion and Alzheimer's diseases, which makes it a potential target for therapeutic agents.

### CHROMOSOMAL LOCATION

Genetic locus: FPR2 (human) mapping to 19q13.41; Fpr2/Fpr3 (mouse) mapping to 17 A3.2.

### SOURCE

FPR2/3 (N-20)-R is an affinity purified rabbit polyclonal antibody raised against a peptide mapping 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.

Blocking peptide available for competition studies, sc-18191 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

FPR2/3 (N-20)-R is recommended for detection of FPR2 of mouse and human origin and FPR3 of mouse 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), 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).

FPR2/3 (N-20)-R is also recommended for detection of FPR2 in additional species, including canine.

Suitable for use as control antibody for FPR2 siRNA (h): sc-40123, FPR2 shRNA Plasmid (h): sc-40123-SH and FPR2 shRNA (h) Lentiviral Particles: sc-40123-V.

Molecular Weight of FPR2: 40 kDa.

Molecular Weight of FPR2 dimer: 100 kDa.

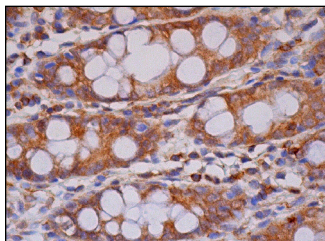
Molecular Weight of FPR3: 40 kDa.

Molecular Weight of FPR3 dimer: 80 kDa.

### STORAGE

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

### DATA



FPR2/3 (N-20)-R: sc-18191-R. Immunoperoxidase staining of formalin fixed, paraffin-embedded human rectum tissue showing cytoplasmic and membrane staining of glandular cells.

### SELECT PRODUCT CITATIONS

1. Heilborn, J.D., et al. 2005. Antimicrobial protein hCAP-18/LL-37 is highly expressed in breast cancer and is a putative growth factor for epithelial cells. *Int. J. Cancer* 114: 713-719.
2. Brandenburg, L.O., et al. 2010. Functional and physical interactions between formyl-peptide-receptors and scavenger receptor MARCO and their involvement in amyloid  $\beta$  1-42-induced signal transduction in glial cells. *J. Neurochem.* 113: 749-760.
3. Braun, B.J., et al. 2011. The formyl peptide receptor like-1 and scavenger receptor MARCO are involved in glial cell activation in bacterial meningitis. *J. Neuroinflammation* 8: 11.
4. Floden, A.M., et al. 2011. Microglia demonstrate age-dependent interaction with amyloid- $\beta$  fibrils. *J. Alzheimers Dis.* 25: 279-293.

### 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.

**MONOS**  
Satisfaction  
Guaranteed

Try **FPR2 (GM1D6): sc-57141**, our highly recommended monoclonal alternative to FPR2/3 (N-20). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **FPR2 (GM1D6): sc-57141**.