

FPR2 (GM1D6): sc-57141

BACKGROUND

The N-formyl peptide receptor (FPR) family is comprised of three members, FPR, FPR like-1 (FPR1, also designated lipoxin A4 receptor, FPRH1 and FPR2) and FPR like-2 (FPR2), 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. FPR1 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 β Amyloid. Upon activation, FPR1 induces migration and calcium mobilization in human monocytes and neutrophils and is involved in inflammatory and host defense responses. FPR1 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.

SOURCE

FPR2 (GM1D6) is a mouse monoclonal antibody raised against FPR2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FPR2 (GM1D6) is available conjugated to agarose (sc-57141 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-57141 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-57141 PE), fluorescein (sc-57141 FITC), Alexa Fluor[®] 488 (sc-57141 AF488), Alexa Fluor[®] 546 (sc-57141 AF546), Alexa Fluor[®] 594 (sc-57141 AF594) or Alexa Fluor[®] 647 (sc-57141 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-57141 AF680) or Alexa Fluor[®] 790 (sc-57141 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

FPR2 (GM1D6) is recommended for detection of FPR2 transiently expressed on the cell surface of transfected BOSC cells of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and flow cytometry (1 μ g per 1 x 10⁶ cells).

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.

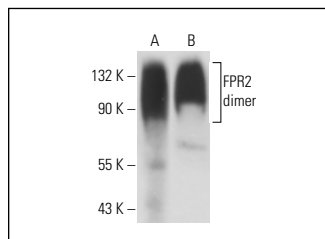
Molecular Weight of FPR2 dimer: 100 kDa.

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

STORAGE

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

DATA



FPR2 (GM1D6): sc-57141. Western blot analysis of FPR2 expression in human PBL (A) and AML-193 (B) whole cell lysates under non-reducing conditions.

SELECT PRODUCT CITATIONS

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- Suzuki, K., et al. 2019. Bacterial lipopolysaccharide and antimicrobial LL-37 enhance ICAM-1 expression and NF κ B p65 phosphorylation in senescent endothelial cells. *Int. J. Mol. Med.* 44: 1187-1196.
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- Cockx, M., et al. 2021. The antimicrobial activity of peripheral blood neutrophils is altered in patients with primary ciliary dyskinesia. *Int. J. Mol. Sci.* 22: 6172.
- Chen, K., et al. 2021. Distinct contributions of cathelin-related antimicrobial peptide (CRAMP) derived from epithelial cells and macrophages to colon mucosal homeostasis. *J. Pathol.* 253: 339-350.
- Busch, L., et al. 2022. Amyloid β and its naturally occurring N-terminal variants are potent activators of human and mouse formyl peptide receptor 1. *J. Biol. Chem.* 298: 102642.
- Zarrouh, A.E., et al. 2023. Resolvin D1 modulates periodontal ligament fibroblast function. *J. Periodontol.* 94: 683-693.
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RESEARCH USE

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