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Product datasheet for TA328619

FPR1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	FC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3,000; FC: 1:50-1:600
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)NFSPWTNDPKERIN, corresponding to amino acid residues 179-192Â of human FPR1. 2nd extracellular loop.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN3.
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	formyl peptide receptor 1
Database Link:	NP_002020 Entrez Gene 2357 Human P21462

View online »

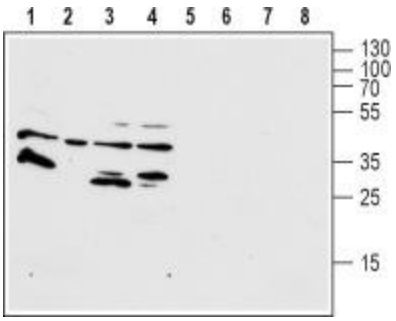
Background: Chemotactic factors from both Gram-positive and Gram-negative bacteria are short peptides with N-formyl methionine at the N-terminus (extensively reviewed in reference 1). These peptides are released from bacteria during infection and activate formyl peptide receptor (FPR), a member of G-protein coupled receptors (GPCRs). In humans, the FPR family consists mainly of three receptors, FPR1, FPR2/ALX (formerly FPRL1), and FPR3 (formerly FPRL2) which all couple to the Gi subtype of G-proteins and ultimately lead to the activation of phospholipase C and intracellular Ca2+ increase. FPRL1 or FPR2/ALX as commonly called is a seven transmembrane protein like all GPCRs. This receptor was originally cloned by screening a HL60 neutrophil cDNA library with a FPR1 cDNA probe. FPR2/ALX shares 69% identity with FPR1 and despite its high homology, it displays relatively low affinity for fmlf, the most potent N-formyl peptide released by bacteria. FPR1 was originally found in neutrophils and later found to be distributed in myeloid and non-myeloid cells as is the case for FPR2/ALX and FPR3 (FPR3 though is not expressed in neutrophils). FPR1 is also expressed in multiple organs and tissues including epithelial cells in organs with secretory functions, endocrine cells, liver hepathocytes, smooth muscle cells and endothelial cells, brain spinal cord and both motor and sensory neurons. FPR2/ALX has a similar tissue distribution to that of FPR1. While N-formyl peptides were the first peptides found to activate these receptors, the ligand diversity for FPR has proven to be quite broad and demonstrates to be both pro- and anti-inflammatory. They include peptidic ligands originating from bacterial and viral sources (including HIV), endogenous ligands such as chemokines and annexins, short peptides associated with inflammation and infection. Indeed, peptides from Herpes, Ebola and coronavirus 229E are ligands of FPR1.

Synonyms: FMLP; FPR

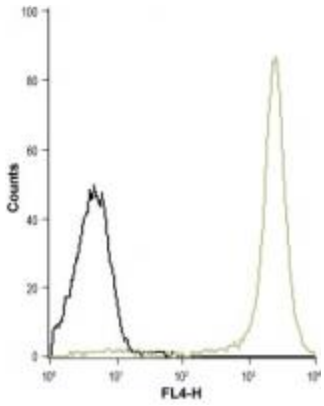
Protein Families: Druggable Genome, GPCR, Transmembrane

Protein Pathways: Neuroactive ligand-receptor interaction

Product images:



Western blot analysis of human HL-60 promyelocytic leukemia (lanes 1 and 4), human THP-1 acute monocytic leukemia (lanes 2 and 6), human T-84 colorectal carcinoma (lanes 3 and 7) and human U-87 MG glioblastoma (lanes 4 and 8) cell lysates: 1-4. Anti-Human FPR1 (extracellular) antibody, (1:200). 5-8. Anti-Human FPR1 (extracellular) antibody, preincubated with the control peptide antigen.



Indirect flow cytometry analysis of live intact human THP-1 acute monocytic leukemia cell line: black line, Unstained cells + goat-anti-rabbit-Cy5. green line, Cells + Anti-Human FPR1 (extracellular) antibody, (1:25) + goat-anti-rabbit-Cy5.