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FPRL2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8793c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P25089
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21312
Calculated MW	39965
Antigen Region	307-333

Additional Information

Gene ID	2359
Other Names	N-formyl peptide receptor 3, FMLP-related receptor II, FMLP-R-II, Formyl peptide receptor-like 2, FPR3, FPRH1, FPRL2
Target/Specificity	This FPRL2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 307-333 amino acids from the Central region of human FPRL2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	FPRL2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	FPR3 {ECO:0000303|PubMed:24108355}
Function	May function as a pattern recognition G-protein coupled receptor (PRR/GPCR) involved in innate recognition of peptides derived from a specific set of bacterial pathogens or host mitochondria as pathogen- and

damage-associated molecular patterns (PAMPs and DAMPs) (PubMed:24108355, PubMed:25605714). Low affinity receptor for a restricted repertoire of bacterial N-formylated peptides including fMKKIML from L. monocytogenes and fMPKLNR from V. cholerae. Contrary to FPR1 and FPR2 does not act as a receptor for fMLF peptide (PubMed:15187149, PubMed:25605714). High affinity receptor for N- acetylated F2L peptide derived from the cleavage of heme-binding protein HEBP1. F2L peptide binding may trigger chemotaxis of monocytes and dendritic cells to facilitate tissue repair (PubMed:15623572). Low affinity receptor for N-acetylated Ac2-26 peptide derived from ANXA1, an anti-inflammatory and pro-resolving agonist. Ac2-26 peptide binding can direct myeloid cell chemotaxis within the inflammatory site where ANXA1 is at high concentrations, but it can also lead to receptor desensitization to limit the inflammatory response (PubMed:15187149). Receptor for MT-RNR2/humanin, a mitochondrial-derived peptide that has an anti-inflammatory role in resolution of inflammation (PubMed:15465011). Peptide binding leads to conformational changes coupled to heterotrimeric G(i) protein signaling. Upon GDP to GTP conversion, G(i)-alpha subunit dissociates from G-beta and G-gamma subunits. Free G(i)-alpha subunit inhibits cyclic adenylate cyclase and cAMP synthesis whereas the G-beta and G-gamma dimer activates downstream phospholipase C-beta and phosphoinositide 3-kinase signaling cascades leading to Ca(2+) influx (PubMed:15187149, PubMed:15465011, PubMed:15623572, PubMed:25605714).

Cellular Location

Cell membrane; Multi-pass membrane protein. Note=Partially localized intracellularly

Tissue Location

Detected in various tissues with highest expression in lung. Expressed in immature dendritic cells (at protein level)

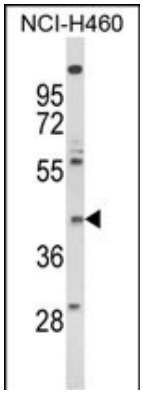
Background

Low affinity receptor for N-formyl-methionyl peptides, which are powerful neutrophils chemotactic factors. Binding of FMLP to the receptor causes activation of neutrophils. This response is mediated via a G-protein that activates a phosphatidylinositol-calcium second messenger system.

References

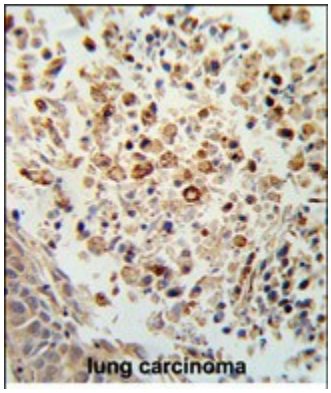
Yang,D., et.al., J. Leukoc. Biol. 72 (3), 598-607 (2002)

Images

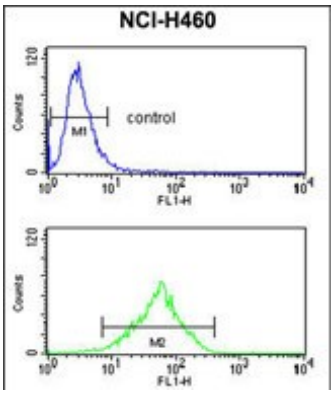


Western blot analysis of FPRL2 Antibody (Center) (Cat. #AP8793c) in NCI-H460 cell line lysates (35ug/lane). FPRL2 (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human lung



carcinoma reacted with FPRL2 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



FPRL2 Antibody (Center) (Cat. #AP8793c) flow cytometry analysis of NCI-H460 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.