abcam

ab249728

Anti-FPR3 antibody [EPR11865] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR11865
Purification technique	Affinity purification
Concentration	0.964 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

Target data

See full target information FPR3

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).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab249728 is the carrier-free version of ab172908.

Patented technology

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Formyl peptide receptor 3 (FPR3) also known as FMLP-R and FPRL2 is a G protein-coupled receptor with a molecular mass of approximately 39 kDa. FPR3 is positioned on the membrane of various immune cells including monocytes and neutrophils. This receptor plays an important role in detecting and responding to chemoattractant molecules. FPR3 can capture and transmit signals through conformational changes facilitating chemotaxis and other immune responses.
Biological function summary	FPR3 influences immune cell behavior and regulates the host's defense mechanisms. It participates in the chemotactic response directing immune cells to sites of infection or inflammation. While it is not part of a larger receptor complex FPR3 functions synergistically with other formyl peptide receptors like FPR1 and FPR2 to fine-tune immune responses. These coordinated activities help in controlling inflammation and microbial defense.
Pathways	Researchers have identified FPR3 as a significant component of the chemotaxis pathway in immune signaling. It interacts with key intracellular signaling molecules leading to the modulation of the MAPK signaling pathway. This coordination enhances immune cell mobility and function. FPR3 shares functional

	characteristics with related proteins such as FPR1 which also participates in the regulation of immune responses necessary for host defense.
Associated diseases and disorders	FPR3 shows involvement in inflammatory conditions and certain types of cancer. Aberrations in FPR3 signaling may contribute to chronic inflammation impacting diseases like rheumatoid arthritis. Its dysregulation can affect cancer progression particularly in scenarios involving tumor-associated macrophages. The interactions between FPR3 and related immune proteins like FPR1 can influence the severity and prognosis of these conditions by modifying the immune environment in pathological tissues.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

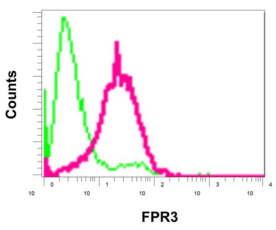
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

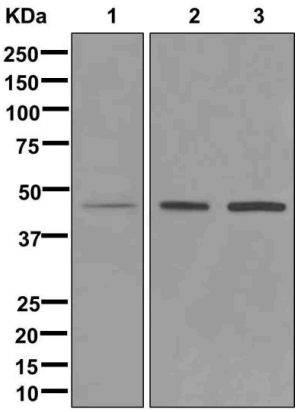
2 product images



Flow Cytometry - Anti-FPR3 antibody [EPR11865] - BSA and Azide free (ab249728)

FPR3 Flow Cytometry staining using rabbit Anti-FPR3 antibody

This data was developed using ab172908, the same antibody clone in a different buffer formulation.
Flow cytometric analysis of NCI-H460 cells labeling FPR3 with ab172908 (red) or a rabbit IgG (negative) (green).



Western blot - Anti-FPR3 antibody [EPR11865] - BSA and Azide free (ab249728)

This data was developed using ab172908, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-FPR3 antibody [EPR11865] (ab172908) at 1/1000 dilution

Lane 1:
Human thymus at 10 µg

Lane 2:
Jurkat cell lysate at 10 µg

Lane 3:
NCI-H460 cell lysate at 10 µg

Predicted band size: 40 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.