

GPR84 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP17390c**Specification**

GPR84 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [O9NQ55](#)**GPR84 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 53831**Other Names**

G-protein coupled receptor 84, Inflammation-related G-protein coupled receptor EX33, GPR84, EX33

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GPR84 Antibody (Center) Blocking Peptide - Protein Information**Name** GPR84**Synonyms** EX33**Function**

G protein-coupled receptor that responds endogenously to dietary fatty acids or nutrient, specifically medium-chain free fatty acid (FFA) with carbon chain lengths of C9 to C14. Capric acid (C10:0), undecanoic acid (C11:0) and lauric acid (C12:0) are the most potent agonists (PubMed:16966319). In immune cells, functions as a pro- inflammatory receptor via 6-OAU and promotes the expression of pro-inflammatory mediators such as TNFalpha, IL-6 and IL-12B as well as stimulating chemotactic responses through activation of signaling mediators AKT, ERK and NF-kappa-B (By similarity). In addition, triggers increased bacterial adhesion and phagocytosis in macrophages and regulates pro-inflammatory function via enhancing NLRP3 inflammasome activation (By similarity). Plays also an important role in inflammation by modulating neutrophil functions (By similarity). Mechanistically, promotes neutrophil chemotaxis, reactive oxygen species (ROS) production and degranulation via LYN-AKT/ERK pathway (By similarity). To regulate ROS, communicates with the two formyl peptide receptors FPR2 and FPR1 to control the NADPH oxidase activity in neutrophils (PubMed:33789297).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

Expressed predominantly in hematopoietic tissues. High levels detected in the bone marrow and lower levels in the peripheral leukocytes and lung. Also expressed in brain, heart, muscle, colon, thymus, spleen, kidney, liver, placenta and intestine. Within the leukocyte population expression is higher in neutrophils and eosinophils relative to T- or B-lymphocytes

GPR84 Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

GPR84 Antibody (Center) Blocking Peptide - Images**GPR84 Antibody (Center) Blocking Peptide - Background**

Receptor for medium-chain free fatty acid (FFA) with carbon chain lengths of C9 to C14. Capric acid (C10:0), undecanoic acid (C11:0) and lauric acid (C12:0) are the most potent agonists. Not activated by short-chain and long-chain saturated and unsaturated FFAs. Activation by medium-chain free fatty acid is coupled to a pertussis toxin sensitive G(i/o) protein pathway. May have important roles in processes from fatty acid metabolism to regulation of the immune system.

GPR84 Antibody (Center) Blocking Peptide - References

Takeda, S., et al. FEBS Lett. 520 (1-3), 97-101 (2002) :Yousefi, S., et al. J. Leukoc. Biol. 69(6):1045-1052(2001)Wittenberger, T., et al. J. Mol. Biol. 307(3):799-813(2001)