

GPR31 Rabbit pAb

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Product Information

Application WB, IHC-P, IHC-F, IF

Primary Accession O00270 Reactivity Human Host Rabbit Clonality Polyclonal 35075 Calculated MW **Physical State** Liquid

Immunogen KLH conjugated synthetic peptide derived from human G protein coupled

receptor 31

121-220/319 **Epitope Specificity**

Isotype IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cell membrane; Multi pass membrane protein. Belongs to the G-protein coupled receptor 1 family. **SIMILARITY**

This product as supplied is intended for research use only, not for use in **Important Note**

human, therapeutic or diagnostic applications.

Enables G protein-coupled receptor activity and arachidonic acid binding **Background Descriptions**

> activity. Involved in G protein-coupled receptor signaling pathway and response to acidic pH. Located in plasma membrane. [provided by Alliance of

Genome Resources, Apr 2022]

Additional Information

Gene ID 2853

12-(S)-hydroxy-5, 8, 10, 14-eicosatetraenoic acid receptor, 12-(S)-HETE **Other Names**

receptor, 12-HETER, G-protein coupled receptor 31, GPR31/12-HETER, GPR31

WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 **Dilution**

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name GPR31

Function

High-affinity receptor for 12-(S)-hydroxy-5,8,10,14- eicosatetraenoic acid (12-S-HETE), with much lower affinities for other HETE isomers (PubMed:21712392, PubMed:29227475). 12-S-HETE is a eicosanoid, a 12-lipoxygenase (ALOX12) metabolite of arachidonic acid, involved in many physiologic and pathologic processes (PubMed:26965684, PubMed:28619714, PubMed:29227475). 12-S-HETE-binding leads to activation of ERK1/2 (MAPK3/MAPK1), MEK, and NF-kappa-B pathways leading to cell growth (PubMed:21712392, PubMed:29227475). Plays a crucial role for proliferation, survival and macropinocytosis of KRAS- dependent cancer cells by mediating the translocation of KRAS from the endoplasmic reticulum to the plasma membrane (PM) and its association with the PM (PubMed:28619714). Contributes to enhanced immune responses by inducing dendrite protrusion of small intestinal CX3CR1(+) phagocytes for the uptake of luminal antigens (By similarity). Acts also as a key receptor for 12-(S)-HETE-mediated liver ischemia reperfusion injury (PubMed:29227475).

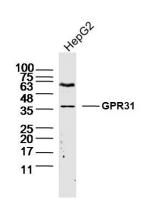
Cellular Location

Cell membrane; Multi-pass membrane protein

Background

Enables G protein-coupled receptor activity and arachidonic acid binding activity. Involved in G protein-coupled receptor signaling pathway and response to acidic pH. Located in plasma membrane. [provided by Alliance of Genome Resources, Apr 2022]

Images

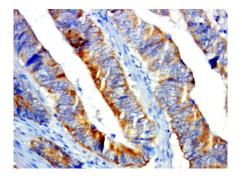


Sample: HepG2 (human)Cell Lysate at 40 ug Primary: Anti-GPR31 (AP55192) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000

dilution

Predicted band size: 35 kD Observed band size: 36 kD



Paraformaldehyde-fixed, paraffin embedded (human colon cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GPR31) Polyclonal Antibody, Unconjugated (AP55192) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

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