

GPR31 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55192

Specification

GPR31 Polyclonal Antibody - Product Information

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

Primary Accession
Host
Clonality
Calculated MW
Physical State

O00270
Rabbit
Polyclonal
35 KDa
Liquid

Immunogen KLH conjugated synthetic peptide derived

from human G protein coupled receptor 31

Epitope Specificity 121-220/319

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.

SIMILARITY Belongs to the G-protein coupled receptor

1 family.

Important Note This product as supplied is intended for

research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

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]

GPR31 Polyclonal Antibody - Additional Information

Gene ID 2853

Other Names

12-(S)-hydroxy-5, 8, 10, 14-eicosatetraenoic acid receptor, 12-(S)-HETE receptor, 12-HETER, G-protein coupled receptor 31, GPR31/12-HETER, GPR31

Dilution

WB~~1:1000<br \><span class</pre>

="dilution IHC-P">IHC-P~~N/A<br \><span class

="dilution_IHC-F">IHC-F~~N/A<br \><span class

="dilution_IF">IF \sim 1:50 \sim 200<br \>ICC \sim N/A<br \>E \sim N/A

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.

GPR31 Polyclonal Antibody - 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:<a

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/a>).

Cellular Location

Cell membrane; Multi-pass membrane protein

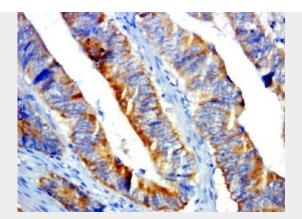
GPR31 Polyclonal Antibody - Protocols

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

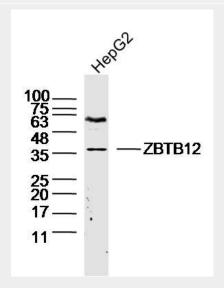
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

GPR31 Polyclonal Antibody - Images





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 (bs-13530R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Sample: HepG2 (human)Cell Lysate at 40 ug

Primary: Anti-ZBTB12(bs-13530R) at 1/300 dilution

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

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