10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# GPR31 Rabbit pAb

GPR31 Rabbit pAb
Catalog # AP55192

## Product Information

| | |
|---|---|
| **Application** | WB, IHC-P, IHC-F, IF |
| **Primary Accession** | O00270 |
| **Reactivity** | Human |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 35075 |
| **Physical State** | 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. |
| **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] |

## 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=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 |
| **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 |

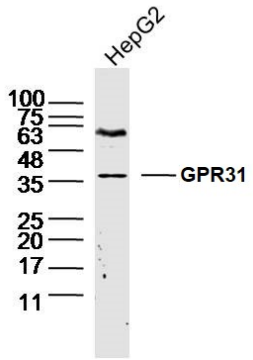
(12-S-HETE), with much lower affinities for other HETE isomers (PubMed:21712392, PubMed:29227475). 12-S-HETE is a eicosanoid, a 12-lipoxygenase (ALOX12) metabolite of arachidonic acid, involved in many physiologic and pathologic processes (PubMed:26965684, PubMed:28619714, PubMed:29227475). 12-S-HETE-binding 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

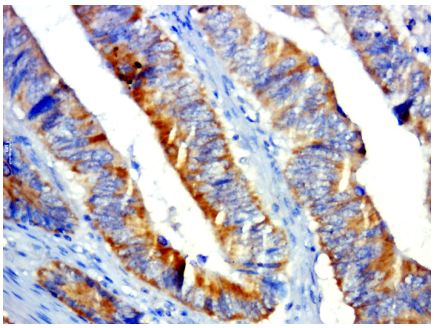
## Background

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

## 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'.