

**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              | <a href="#">O00270</a>  |
| Host                           | Rabbit  |
| Clonality                      | Polyclonal  |
| Calculated MW                  | 35 KDa  |
| Physical State                 | Liquid  |
| Immunogen                      | KLH conjugated synthetic peptide derived from human G protein coupled receptor 31   |
| Epitope Specificity            | 121-220/319   |
| Isotype                        | IgG   |
| <b>Purity</b>                  |   |
| 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  
IHC-P~~N/A  
IHC-F~~N/A  
IF~~1:50~200  
ICC~~N/A  
E~~N/A

**Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

### 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:<a href="http://www.uniprot.org/citations/21712392" target="\_blank">21712392</a>, PubMed:<a href="http://www.uniprot.org/citations/29227475" target="\_blank">29227475</a>). 12-S-HETE is a eicosanoid, a 12-lipoxygenase (ALOX12) metabolite of arachidonic acid, involved in many physiologic and pathologic processes (PubMed:<a href="http://www.uniprot.org/citations/26965684" target="\_blank">26965684</a>, PubMed:<a href="http://www.uniprot.org/citations/28619714" target="\_blank">28619714</a>, PubMed:<a href="http://www.uniprot.org/citations/29227475" target="\_blank">29227475</a>). 12-S-HETE-binding leads to activation of ERK1/2 (MAPK3/MAPK1), MEK, and NF-kappa-B pathways leading to cell growth (PubMed:<a href="http://www.uniprot.org/citations/21712392" target="\_blank">21712392</a>, PubMed:<a href="http://www.uniprot.org/citations/29227475" target="\_blank">29227475</a>). 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:<a href="http://www.uniprot.org/citations/28619714" target="\_blank">28619714</a>). 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:<a href="http://www.uniprot.org/citations/29227475" target="\_blank">29227475</a>).

### Cellular Location

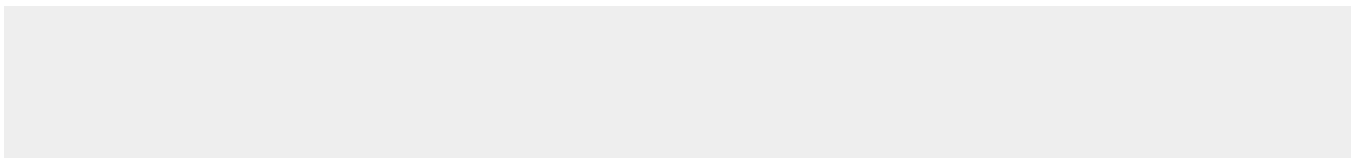
Cell membrane; Multi-pass membrane protein

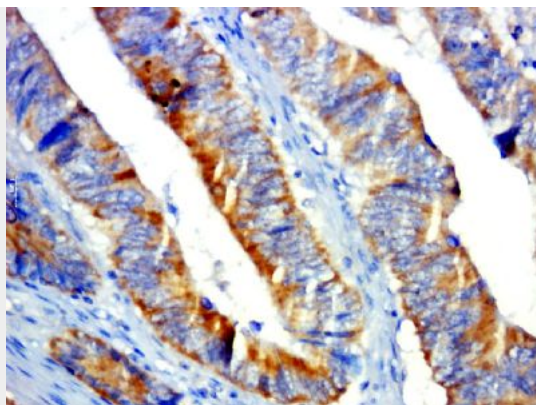
## GPR31 Polyclonal Antibody - Protocols

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

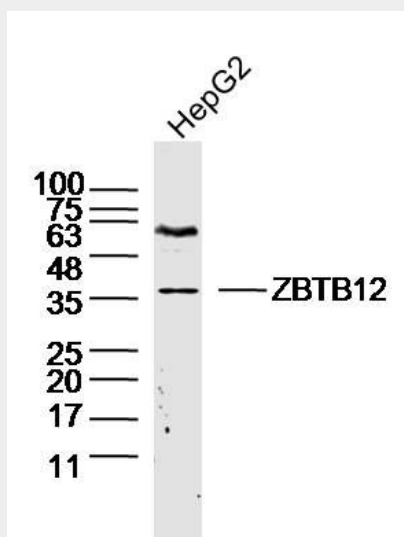
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## 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