

GPR31 Antibody (Extracellular Domain)
Rabbit Polyclonal Antibody
Catalog # ALS10283

Specification

GPR31 Antibody (Extracellular Domain) - Product Information

Application	IHC
Primary Accession	O00270
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35kDa KDa

GPR31 Antibody (Extracellular Domain) - 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

Target/Specificity

Human GPR31. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & Storage

Long term: -70°C; Short term: +4°C

Precautions

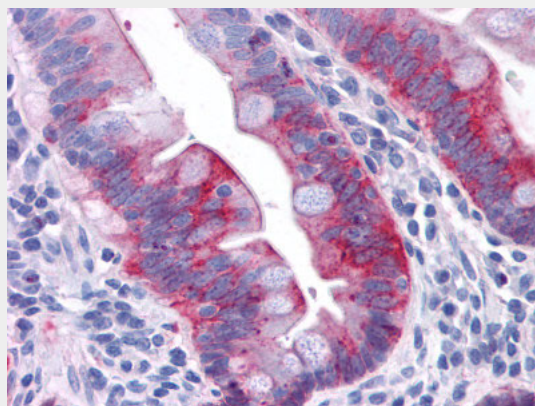
GPR31 Antibody (Extracellular Domain) is for research use only and not for use in diagnostic or therapeutic procedures.

GPR31 Antibody (Extracellular Domain) - Protein Information

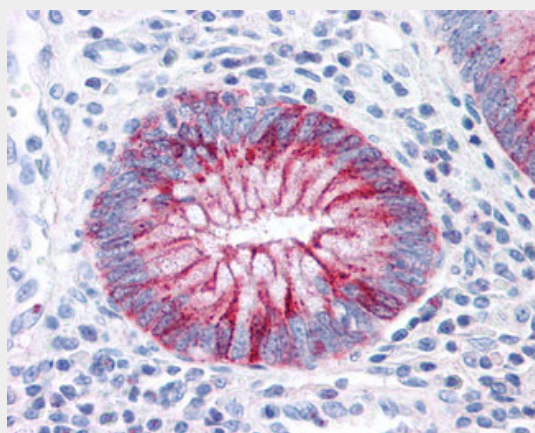
Name GPR31

Function

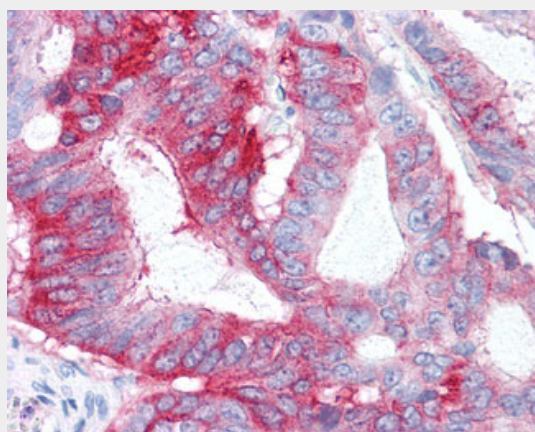
High-affinity receptor for 12-(S)-hydroxy-5,8,10,14- eicosatetraenoic acid (12-S-HETE), with much lower affinities for other HETE isomers (PubMed:21712392),



Anti-GPR31 antibody ALS10283 IHC of human small intestine, epithelium.



Anti-GPR31 antibody IHC of human Colon, Carcinoma.



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

Volume

50 µl

GPR31 Antibody (Extracellular Domain) - Protocols

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

Anti-GPR31 antibody IHC of human Colon, Carcinoma.

GPR31 Antibody (Extracellular Domain) - Background

High-affinity receptor for 12-(S)-hydroxy-5,8,10,14- eicosatetraenoic acid (12-S-HETE). 12-(S)-HETE is an arachidonic acid metabolite secreted by platelets and tumor cells, and known to induce endothelial cells retraction allowing invasive cell access to the subendothelial matrix, which is a critical step for extravasation or metastasis. Ligand-binding lead to activation of ERK1/2 (MAPK3/MAPK1), MEK, and NF-kappa-B.

GPR31 Antibody (Extracellular Domain) - References

Zingoni A.,et al.Genomics 42:519-523(1997).
Kaighin V.A.,et al.Submitted (DEC-2007) to the EMBL/GenBank/DDBJ databases.
Mungall A.J.,et al.Nature 425:805-811(2003).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Guo Y.,et al.J. Biol. Chem. 286:33832-33840(2011).

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