

LGR5 antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22389a

Specification

LGR5 antibody (N-term) - Product Information

Application	IHC, WB,E
Primary Accession	O75473
Reactivity	Hamster
Predicted	Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	99998

LGR5 antibody (N-term) - Additional Information

Gene ID 8549

Other Names

Leucine-rich repeat-containing G-protein coupled receptor 5, G-protein coupled receptor 49, G-protein coupled receptor 67, G-protein coupled receptor HG38, LGR5, GPR49, GPR67

Target/Specificity

This antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between amino acids from human.

Dilution

IHC~~1:500-1:1000

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

LGR5 antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

LGR5 antibody (N-term) - Protein Information

Name LGR5

Synonyms GPR49, GPR67

Function Receptor for R-spondins that potentiates the canonical Wnt signaling pathway and acts as a stem cell marker of the intestinal epithelium and the hair follicle. Upon binding to R-spondins (RSPO1, RSPO2, RSPO3 or RSPO4), associates with phosphorylated LRP6 and frizzled receptors that are activated by extracellular Wnt receptors, triggering the canonical Wnt signaling pathway to increase expression of target genes. In contrast to classical G-protein coupled receptors, does not activate heterotrimeric G-proteins to transduce the signal. Involved in the development and/or maintenance of the adult intestinal stem cells during postembryonic development.

Cellular Location

Cell membrane; Multi-pass membrane protein. Golgi apparatus, trans-Golgi network membrane; Multi-pass membrane protein Note=Rapidly and constitutively internalized to the trans-Golgi network at steady state. Internalization to the trans-Golgi network may be the result of phosphorylation at Ser-861 and Ser-864; however, the phosphorylation event has not been proven (PubMed:23439653)

Tissue Location

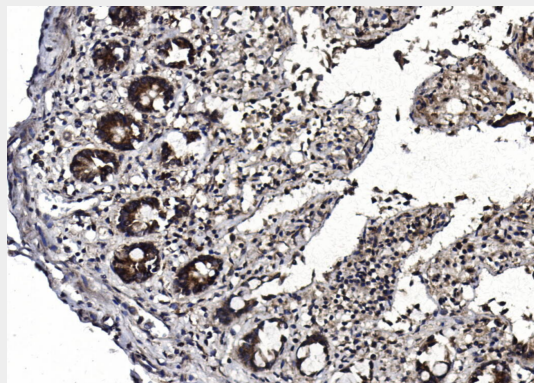
Expressed in skeletal muscle, placenta, spinal cord, and various region of brain. Expressed at the base of crypts in colonic and small mucosa stem cells. In premalignant cancer expression is not restricted to the crypt base. Overexpressed in cancers of the ovary, colon and liver.

LGR5 antibody (N-term) - Protocols

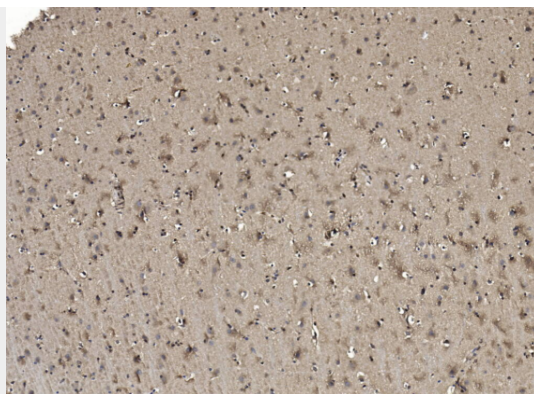
Provided below are standard protocols that you may find useful for product applications.

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

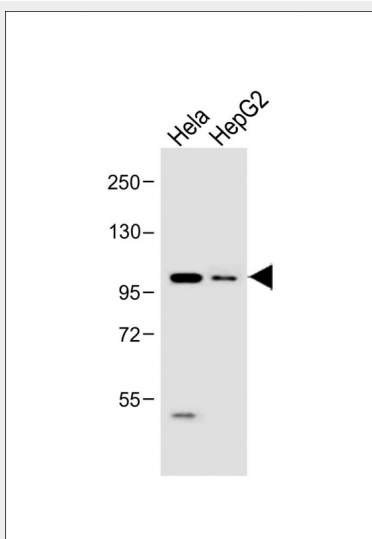
LGR5 antibody (N-term) - Images



Immunohistochemical analysis of LGR5 Rabbit Brain tissue using AP22389a performed on the Abcarta FAIP-30 Fully automated IHC platform. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9.0). Samples were incubated with primary antibody (Ready-to-use) for 15 min at room temperature. AmpSee™ Detection Systems was used as the secondary antibody.



Immunohistochemical analysis of LGR5 Rabbit Small intestine tissue using AP22389a performed on the Abcarta FAIP-30 Fully automated IHC platform. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9.0). Samples were incubated with primary antibody (Ready-to-use) for 15 min at room temperature. AmpSee™ Detection Systems was used as the secondary antibody.



All lanes : Anti-LGR5 antibody (N-term) at 1:1000 dilution Lane 1: HeLa whole cell lysate Lane 2: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Observed band size : 100 kDa Blocking/Dilution buffer: 5% NFDm/TBST.

LGR5 antibody (N-term) - Background

Receptor for R-spondins that potentiates the canonical Wnt signaling pathway and acts as a stem cell marker of the intestinal epithelium and the hair follicle. Upon binding to R-spondins (RSPO1, RSPO2, RSPO3 or RSPO4), associates with phosphorylated LRP6 and frizzled receptors that are activated by extracellular Wnt receptors, triggering the canonical Wnt signaling pathway to increase expression of target genes. In contrast to classical G-protein coupled receptors, does not activate heterotrimeric G-proteins to transduce the signal. Involved in the development and/or maintenance of the adult intestinal stem cells during postembryonic development.

LGR5 antibody (N-term) - References

McDonald T., et al. *Biochem. Biophys. Res. Commun.* 247:266-270(1998).
Hsu S.Y., et al. *Mol. Endocrinol.* 12:1830-1845(1998).
Rot S., et al. Submitted (APR-2010) to the EMBL/GenBank/DDBJ databases.
Scherer S.E., et al. *Nature* 440:346-351(2006).

Yamamoto Y., et al. Hepatology 37:528-533(2003).

LGR5 antibody (N-term) - Citations

- [Establishment of Intestinal Organoid from and the Susceptibility to Bat-Associated Viruses, SARS-CoV-2 and Pteropine Orthoreovirus](#)
- [Vitamin D suppresses intestinal epithelial stemness via ER stress induction in intestinal organoids](#)