LGR5 (GPR49) Antibody (loop1)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2745c

Specification

LGR5 (GPR49) Antibody (loop1) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	[O75473](#)
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**99998**
Antigen Region	**605-638**

LGR5 (GPR49) Antibody (loop1) - 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 LGR5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 605-638 amino acids from human LGR5.

Dilution
WB~~1:1000
IHC-P~~1:10~50
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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 (GPR49) Antibody (loop1) is for research use only and not for use in diagnostic or therapeutic procedures.

LGR5 (GPR49) Antibody (loop1) - 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 cript base. Overexpressed in cancers of the ovary, colon and liver.
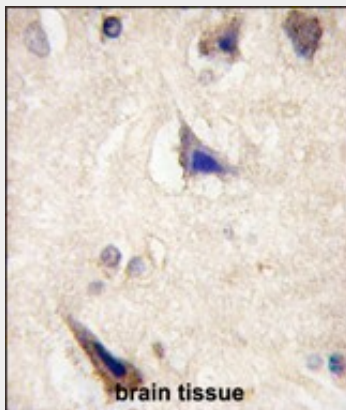
LGR5 (GPR49) Antibody (loop1) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

LGR5 (GPR49) Antibody (loop1) - Images
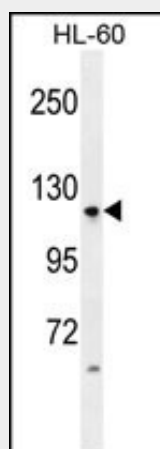
LGR5/GPR49 Antibody (loop1) (Cat. #AP11867a) western blot analysis in HL-60 cell line lysates (35ug/lane).This demonstrates the LGR5/GPR49 antibody detected the LGR5/GPR49 protein (arrow).

brain tissue

Formalin-fixed and paraffin-embedded human brain tissue reacted with LGR5/GPR49 antibody (loop1) (Cat.#AP2745c), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

LGR5 (GPR49) Antibody (loop1) - Background

LGR5/GPR49 is an orphan receptor. It may be an important receptor for signals controlling growth and differentiation of specific embryonic tissues.

LGR5 (GPR49) Antibody (loop1) - References

Barker,N., Nature 449 (7165), 1003-1007 (2007) McClanahan,T., Cancer Biol. Ther. 5 (4), 419-426 (2006) Yamamoto,Y., Hepatology 37 (3), 528-533 (2003) Hsu,S.Y., Mol. Endocrinol. 14 (8), 1257-1271 (2000)