

## LGR5/GPR49 Antibody

Rabbit mAb Catalog # AP90408

### **Specification**

## **LGR5/GPR49 Antibody - Product Information**

WB, FC, IP Application **Primary Accession** 075473 Reactivity Rat **Monoclonal** Clonality

**Other Names** 

FEX; GPR49; GPR67; GRP49; LGR5; HG38;8

Isotype Rabbit IgG Host **Rabbit** Calculated MW 99998 Da

# LGR5/GPR49 Antibody - Additional Information

WB~~1:1000 Dilution

FC~~1:10~50 IP~~N/A

Purification

**Affinity-chromatography Immunogen** A synthesized peptide derived from human

LGR5/GPR49

Description **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. Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short

term. Store at -20°C long term. Avoid

freeze / thaw cycle.

### **LGR5/GPR49 Antibody - Protein Information**

Name LGR5

Synonyms GPR49, GPR67

Storage Condition and Buffer

**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**

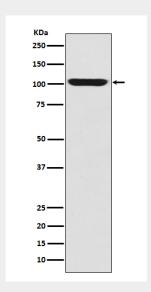
Expressed in skeletal muscle, placenta, spinal cord, and various region of brain. Expressed at the base of crypts in colonic and small mucosa stem cells. In premalignant cancer expression is not restricted to the cript base. Overexpressed in cancers of the ovary, colon and liver.

#### LGR5/GPR49 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## LGR5/GPR49 Antibody - Images



Western blot analysis of GPR49 expression in Human fetal skeletal muscle lysate.