

**GPR49 / LGR5 Antibody (Cytoplasmic Domain)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS10310**

**Specification**

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**GPR49 / LGR5 Antibody (Cytoplasmic Domain) - Product Information**

Application	IHC
Primary Accession	<a href="#">O75473</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	100kDa KDa

**GPR49 / LGR5 Antibody (Cytoplasmic Domain) - 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**

Human GPR49 / LGR5. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

**Reconstitution & Storage**

Long term: -70°C; Short term: +4°C

**Precautions**

GPR49 / LGR5 Antibody (Cytoplasmic Domain) is for research use only and not for use in diagnostic or therapeutic procedures.

**GPR49 / LGR5 Antibody (Cytoplasmic Domain) - 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.

#### **Volume**

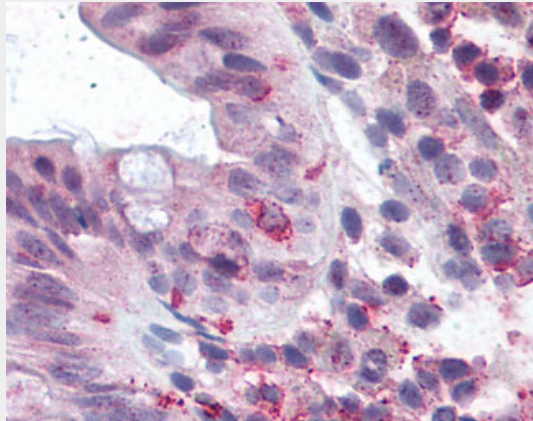
50 µl

### **GPR49 / LGR5 Antibody (Cytoplasmic Domain) - 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](#)

### **GPR49 / LGR5 Antibody (Cytoplasmic Domain) - Images**



Human Colon: Formalin-Fixed Paraffin-Embedded (FFPE)

### **GPR49 / LGR5 Antibody (Cytoplasmic Domain) - 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.

**GPR49 / LGR5 Antibody (Cytoplasmic Domain) - 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).