

## Rabbit Anti-GPR49/Cy5 Conjugated antibody

SL1117R-Cy5

<b>Product Name</b>	Anti-GPR49/Cy5
<b>Chinese Name</b>	Cy5 标记的 G protein-coupled receptor49 抗体
<b>Alias</b>	G protein coupled receptor 49; G-protein coupled receptor 49; G-protein coupled receptor 67; GPCR GPR49; G protein coupled receptor 67; FEX; g protein-coupled receptor fex; G-protein coupled receptor HG38; GPR 49; GPR 67; GPR49; GPR67; Leucine rich repeat containing G protein coupled receptor 5; LGR5; HG 38; HG38; LGR5; LGR5_HUMAN; MGC117008; Leucine-rich repeat-containing G-protein coupled receptor 5; LGR 5; Orphan G protein coupled receptor HG38.
<b>Research Area</b>	Tumour Signal transduction Stem cells Apoptosis G protein-coupled receptor G protein signal
<b>Immunogen Species</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>React Species</b>	Human,Mouse(predicted:Rat)
<b>Applications</b>	Flow-Cyt=3 $\mu$ g/Test,IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight</b>	98kDa
<b>Form</b>	Lyophilized or Liquid
<b>Concentration</b>	1mg/ml
<b>immunogen</b>	KLH conjugated synthetic peptide derived from mouse GPR49 C-terminus
<b>Lsotype</b>	IgG
<b>Purification</b>	affinity purified by Protein A
<b>Storage Buffer</b>	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>Storage</b>	
<b>Product Detail</b>	<b>background:</b> The protein encoded by this gene is a leucine-rich repeat-containing receptor

(LGR) and member of the G protein-coupled, 7-transmembrane receptor (GPCR) superfamily. The encoded protein is a receptor for R-spondins and is involved in the canonical Wnt signaling pathway. This protein plays a role in the formation and maintenance of adult intestinal stem cells during postembryonic development. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2015]

**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.

**Subunit:**

Identified in a complex composed of RNF43, LGR5 and RSPO1.

**Subcellular Location:**

Cell membrane; Multi-pass membrane protein.

**Tissue Specificity:**

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.

**Similarity:**

Belongs to the G-protein coupled receptor 1 family.  
Contains 16 LRR (leucine-rich) repeats.  
Contains 1 LRRNT domain.

**Database links:**

[Entrez Gene: 8549](#) Human

[Entrez Gene: 14160](#) Mouse

[Entrez Gene: 299802](#) Rat



[Omim: 606667](#) Human

[SwissProt: O75473](#) Human

[SwissProt: Q9Z1P4](#) Mouse

[Unigene: 658889](#) Human

[Unigene: 42103](#) Mouse

[Unigene: 214063](#) Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Lgr5 基因（Wnt 细胞信号系统）是一种 G protein-coupled receptor，已经被确定为几种成年组织和癌症中 Stem cells 的一个独特标记。Lgr5 最初是在结肠癌细胞中发现的，有报道称：在恶化前的小鼠腺瘤中也有发现，这说明 Lgr5 很可能也是其他组织成体 Stem cells 和癌症 Stem cells 的 Maker。