



Rabbit Anti-GPR49/LGR5 antibody

SL20747R

Product Name:	GPR49/LGR5
Chinese Name:	G protein-coupled receptor49抗体
Alias:	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; GPR67; Leucine rich repeat containing G protein coupled receptor 5; HG 38; HG38; LGR5; LGR5_HUMAN; MGC117008; Leucine-rich repeat-containing G-protein coupled receptor 5; LGR 5; Orphan G protein coupled receptor HG38.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg/TestICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	98kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human GPR49/LGR5:211-310/907<Extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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.

SWISS:

O75473

Gene ID:

8549

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

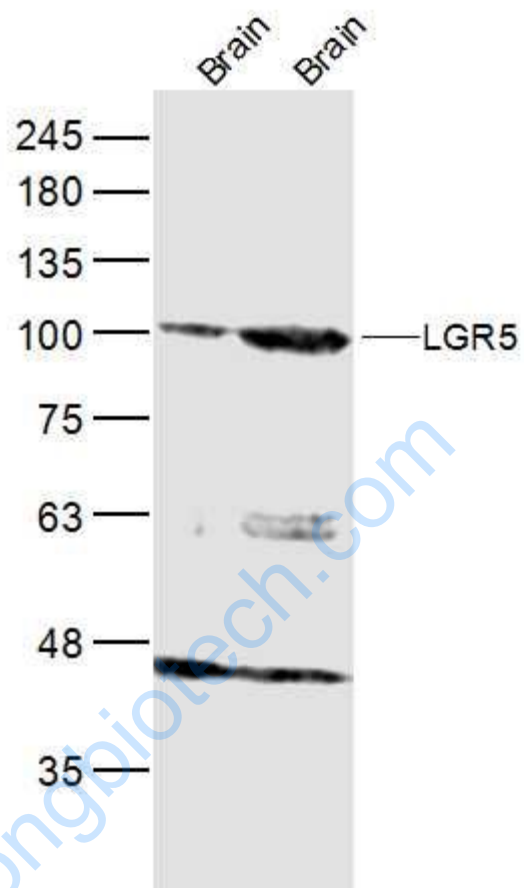
[Unigene: 214063](#)Rat

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Marker。

Picture:



Sample:

Brain (Mouse) Lysate at 40 ug

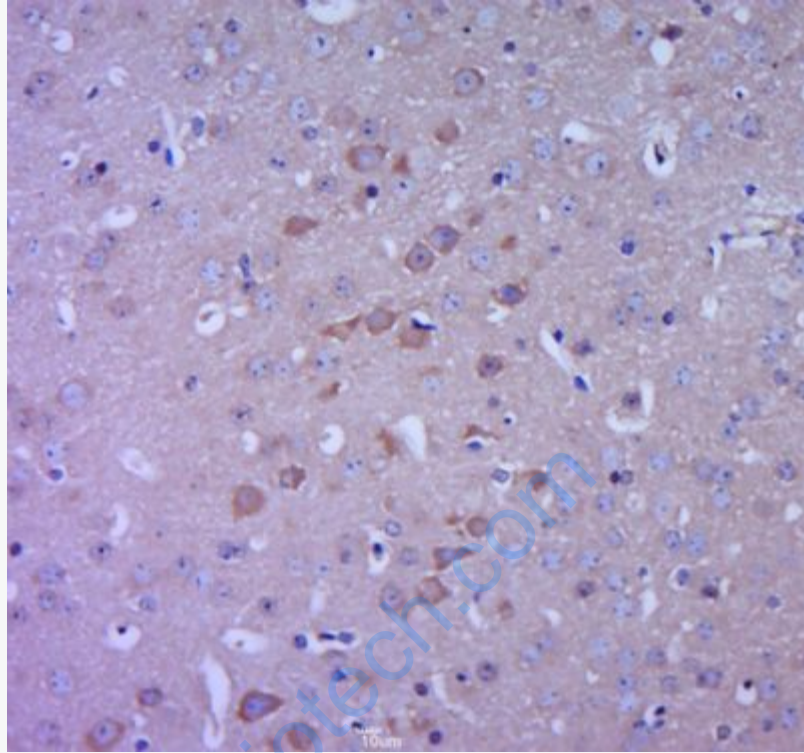
Brain (Rat) Lysate at 40 ug

Primary: Anti-LGR5 (SL20747R) at 1/300 dilution

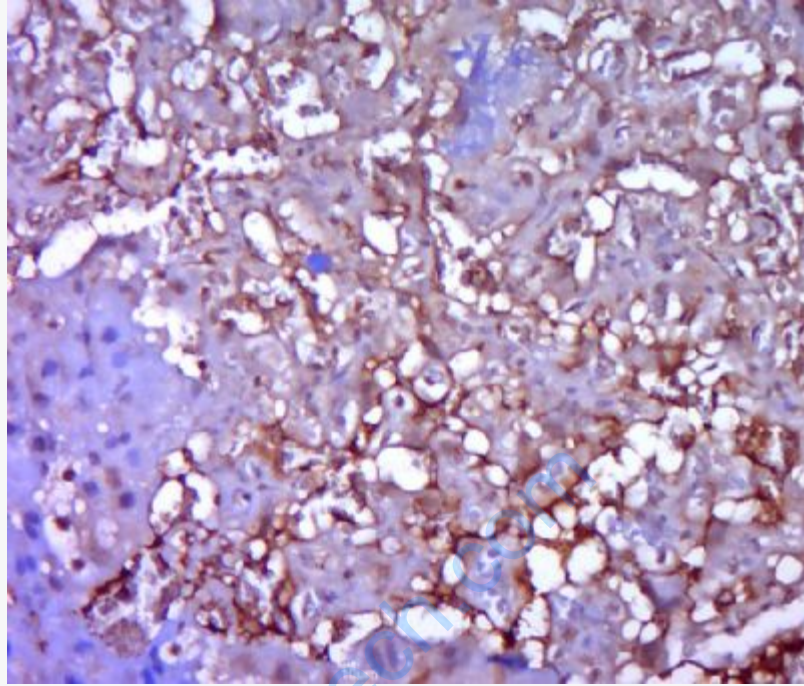
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 98 kD

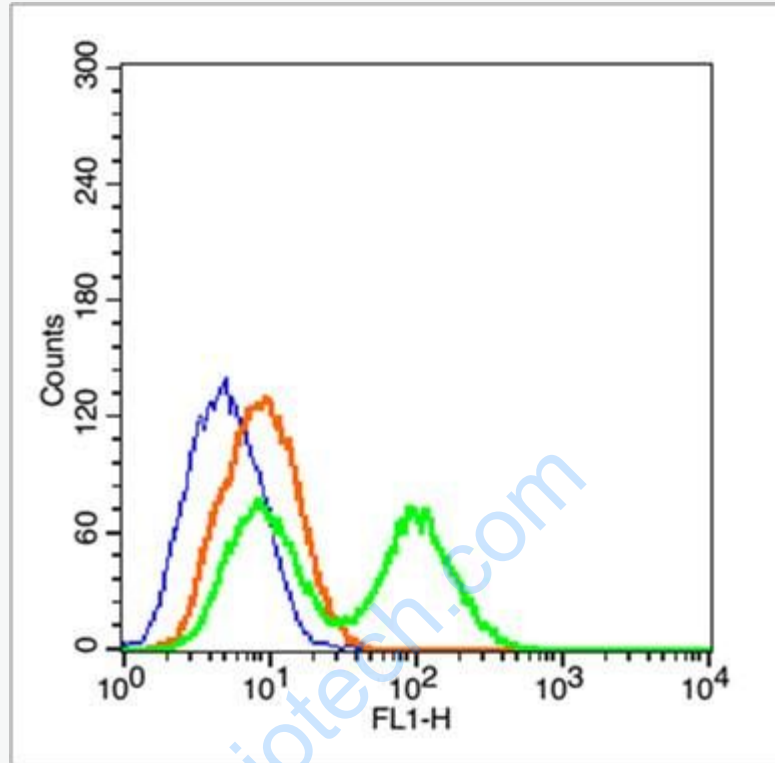
Observed band size: 100 kD



Paraformaldehyde-fixed, paraffin embedded (mouse brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GPR49) Polyclonal Antibody, Unconjugated (SL20747R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse placenta tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GPR49) Polyclonal Antibody, Unconjugated (SL20747R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Blank control (blue line): U251(fixed with pre-warmed 4% paraformaldehyde for 30min at 37°C)

Primary Antibody (green line): Rabbit Anti-GPR49 antibody (SL20747R), Dilution: 1µg /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-FITC, Dilution: 1µg /test.