

## **Product datasheet for TA336750**

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## **LGR5 Rabbit Polyclonal Antibody**

**Product data:** 

Product Type: Primary Antibodies

Applications: FC, ICC/IF, IHC, WB

Recommended Dilution: Immunohistochemistry-Paraffin: 1:200, Immunohistochemistry-Frozen,

Immunocytochemistry/ Immunofluorescence: 2-5 ug/ml, Western Blot: 1.0-2.0 ug/ml, Flow

(Intracellular), Immunohistochemistry: 1:200

**Reactivity:** Human, Porcine, Mouse

Host: Rabbit

Clonality: Polyclonal

Immunogen: Synthetic peptide made to an internal portion of the human GPR49/LGR5 protein (within

residues 650-700). [Swiss-Prot# O75473]

Formulation: PBS, 0.02% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid

freeze-thaw cycles.

**Concentration:** lot specific

**Purification:** Immunogen affinity purified

Conjugation: Unconjugated

Storage: Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Gene Name:** leucine-rich repeat containing G protein-coupled receptor 5

Database Link: NP 003658

Entrez Gene 14160 MouseEntrez Gene 8549 Human

<u>075473</u>





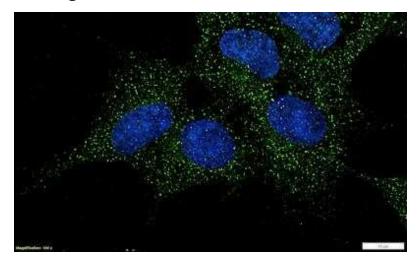
Background:

GPR49/LGR5 (G protein-coupled receptor 49 / leucine-rich repeat-containing G protein-coupled receptor 5), also called FEX, GPR67, GRP49, HG38 or MGC117008), is structurally related to members of glycoprotein hormone receptor family including FSH-R, TSH-R and LH-R. LGRs (leucine-rich repeat-containing G-protein coupled receptor) are divided into three major subgroups: glycoprotein hormone receptors; the subgroup of GPR48, GPR49, and LGR6; and receptors of relaxin family ligands (LGR7 and LGR8), of which GPR49 is emerging as a significant player in stem cells biology as it is highly expressed on stem cells in small intestine, colon and hair follicle. Deficiency of GPR49 in mice has been shown to cause neonatal lethality characterized by ankyloglossia, gastrointestinal distension and induction of premature differentiation of Paneth cells. LGR5 is a downstream target gene of Wnt signaling pathway (critical for morphogenesis and tumorigenesis) and it has also been reported as a receptor for R-spondins which are potent mediators of Wnt/beta-catenin as well as Wnt/PCP signaling. Accordingly, when compared to normal tissues, LGR5 is found upregulated in certain cancers e.g liver cancer with beta-catenin mutations, basal cell carcinoma, colon and ovarian carcinomas.

**Synonyms:** FEX; GPR49; GPR67; GRP49; HG38

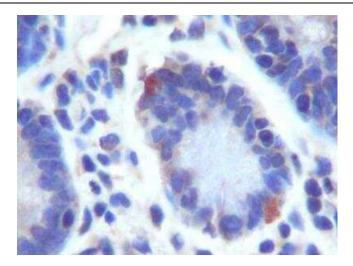
**Protein Families:** Druggable Genome, GPCR, Transmembrane

## **Product images:**



Immunocytochemistry/Immunofluorescence: Lgr5/GPR49 Antibody TA336750 - Hek293 cells were fixed in 4% paraformaldehyde for 10 minutes and permeabilized in 0.05% Triton X-100 in PBS for 5 minutes. The cells were incubated with anti-Lgr5/GPR49 Antibody TA336750 at 2 ug/ml overnight at 4C and detected with an antirabbit Dylight 488 (Green) at a 1:1000 dilution for 60 minutes. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 100X objective and digitally deconvolved.





Immunohistochemistry: Lgr5/GPR49 Antibody TA336750 - Analysis of human small intestine.