

GPR49 Rabbit pAb

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Catalog # AP94473

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q9Z1P4
Reactivity	Human, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	99666
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from mouse GPR49
Epitope Specificity	810-907/907
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell membrane; Multi-pass membrane protein.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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]

Additional Information

Gene ID	14160
Other Names	Leucine-rich repeat-containing G-protein coupled receptor 5, G-protein coupled receptor 49, Orphan G-protein coupled receptor FEX, Lgr5, Fex {ECO:0000303 PubMed:9920770}, Gpr49
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=1 µg/Test
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

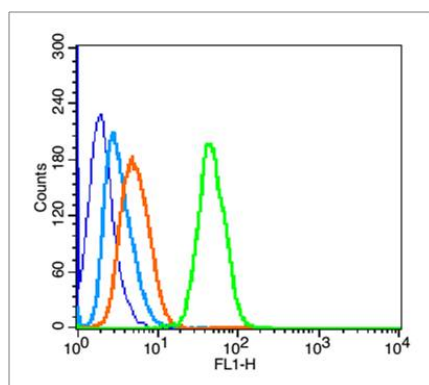
Protein Information

Name	Lgr5
Synonyms	Fex {ECO:0000303 PubMed:9920770}, Gpr49
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.
Tissue Location	Expressed in the intestinal epithelium (at protein level) (PubMed:22510880). Expressed in the gonads, the adrenal gland, and in the brain. In the central nervous system expression is restricted to the olfactory bulb. In the adrenal gland detected only in the neural-crest derived chromaffin cells of the medulla, but not in the cells of the adrenal cortex. In the gonads, the expression is high in Graafian follicle, but absent from primary and secondary follicles. In the intestine, exclusively expressed in cycling crypt base columnar cells. Expressed in the lower bulge and secondary germ area of telogen hair follicles and in the lower outer root sheath of anagen hair follicle.

Background

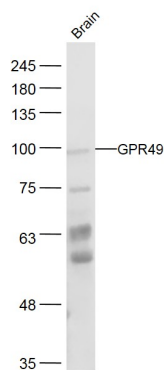
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Images



Blank control (blue line):Hela(blue).
Primary Antibody (green line): Rabbit Anti-GPR49 antibody(AP94473),
Dilution: 3 µg /10⁶ cells;
Isotype Control Antibody (orange line): Rabbit IgG .
Secondary Antibody (white blue line): Goat anti-rabbit IgG-FITC
Dilution: 1 µg /test.
Protocol

The cells were fixed with 70% ethanol (Overnight at 4°C) and then permeabilized with 90% ice-cold methanol for 30 min on ice. Cells stained with Primary Antibody for 30 min at room temperature. The cells were then incubated in 1 X PBS/2%BSA/10% goat serum to block non-specific protein-protein interactions followed by the antibody for 15 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.



Sample:

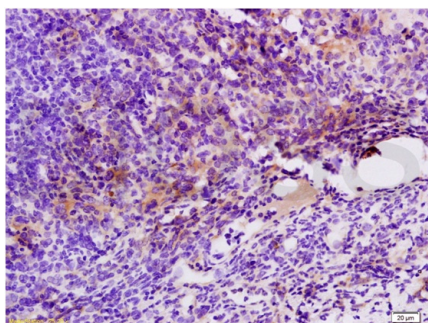
Brain (Mouse) Lysate at 40 ug

Primary: Anti-GPR49 (AP94473) at 1/300 dilution

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

Predicted band size: 98 kD

Observed band size: 98 kD



Tissue/cell: mouse colon carcinoma; 4%

Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling

bathing for 15min; Block endogenous peroxidase by 3%

Hydrogen peroxide for 30min; Blocking buffer (normal

goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-GPR49/LGR5 Polyclonal Antibody,

Unconjugated(AP94473) 1:200, overnight at 4°C, followed

by conjugation to the secondary antibody(SP-0023) and

DAB(C-0010) staining

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.