

GPR49 Rabbit pAb

GPR49 Rabbit pAb Catalog # AP94473

Specification

GPR49 Rabbit pAb - Product Information

Application WB, IHC-P
Primary Accession O921P4
Reactivity Mouse
Host Rabbit
Clonality Polyclonal
Calculated MW 99666

GPR49 Rabbit pAb - 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

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

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.

GPR49 Rabbit pAb - 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.





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Tissue Location

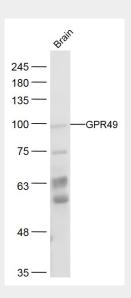
Expressed in the intestinal epithelium (at protein level) (PubMed:22510880). Expressed in the gonads, the adrenal gland, and in the brain. In the central nervous system expression is restricted to the olfactory bulb. In the adrenal gland detected only in the neural-crest derived chromaffin cells of the 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.

GPR49 Rabbit pAb - Protocols

Provided below are standard protocols that you may find useful for product applications.

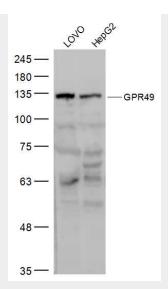
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GPR49 Rabbit pAb - Images

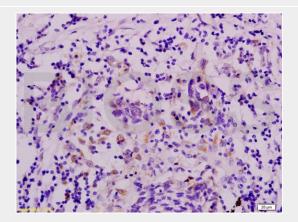


Sample: Brain (Mouse) Lysate at 40 ug Primary: Anti-GPR49 (AP94473) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 98 kD Observed band size: 98 kD

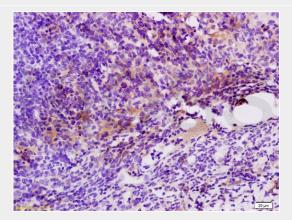




Sample: LOVO(Human) Cell Lysate at 30 ug HepG2(Human) Cell Lysate at 30 ug Primary: Anti-GPR49 (AP94473) at 1/500 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 98 kD Observed band size: 125 kD



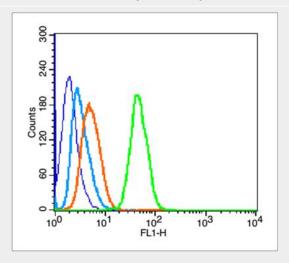
Tissue/cell: human colon carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: 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



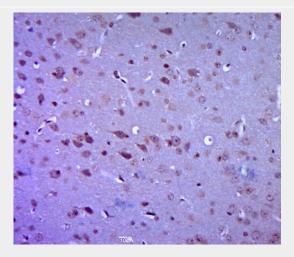
Tissue/cell: mouse colon carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20



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



Blank control (blue line):Hela(blue). Primary Antibody (green line): Rabbit Anti-GPR49 antibody(AP94473), Dilution: 3 μg /10^6 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.



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 (AP94473) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

GPR49 Rabbit pAb - Background

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