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LGR5 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO2137a

Product Information

Application	WB, E
Primary Accession	O75473
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2B5C3
Isotype	IgG2b
Calculated MW	99998
Description	LGR5 (Leucine-Rich Repeat Containing G Protein-Coupled Receptor 5) is a Protein Coding gene. Among its related pathways are Wnt signaling pathway (KEGG). GO annotations related to this gene include G-protein coupled receptor activity and transmembrane signaling receptor activity. An important paralog of this gene is LGR6.
Immunogen	Purified recombinant fragment of human LGR5 (AA: 22-178) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	8549
Other Names	Leucine-rich repeat-containing G-protein coupled receptor 5, G-protein coupled receptor 49, G-protein coupled receptor 67, G-protein coupled receptor HG38, LGR5, GPR49, GPR67
Dilution	WB~~1/500 - 1/2000 E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	LGR5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	LGR5
Synonyms	GPR49, GPR67

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. Internalization to the trans-Golgi network may be the result of phosphorylation at Ser-861 and Ser-864; however, the phosphorylation event has not been proven (PubMed:23439653)
Tissue Location	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.

References

1.Tumour Biol. 2014 Nov;35(11):11605-12. 2.Int J Mol Med. 2014 Jul;34(1):35-42.

Images

