

GPR48 / LGR4 Antibody (N-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS10680

Specification

GPR48 / LGR4 Antibody (N-Terminus) - Product Information

Application	IHC-P
Primary Accession	O9BXB1
Reactivity	Human, Mouse, Rabbit, Monkey, Pig
Host	Rabbit
Clonality	Polyclonal
Calculated MW	104kDa KDa
Dilution	IHC-P~~N/A

GPR48 / LGR4 Antibody (N-Terminus) - Additional Information

Gene ID 55366

Other Names

Leucine-rich repeat-containing G-protein coupled receptor 4, G-protein coupled receptor 48, LGR4, GPR48

Target/Specificity

Human LGR4. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & Storage

Long term: -70°C; Short term: +4°C

Precautions

GPR48 / LGR4 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

GPR48 / LGR4 Antibody (N-Terminus) - Protein Information

Name LGR4

Synonyms GPR48

Function

Receptor for R-spondins that potentiates the canonical Wnt signaling pathway and is involved in the formation of various organs. 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. Its function as activator of the Wnt signaling pathway is required for the development of various organs, including liver, kidney, intestine, bone, reproductive tract and eye. May also act as a receptor for norrin (NDP), such results however require additional confirmation in

vivo. Required during spermatogenesis to activate the Wnt signaling pathway in peritubular myoid cells. Required for the maintenance of intestinal stem cells and Paneth cell differentiation in postnatal intestinal crypts. Acts as a regulator of bone formation and remodeling. Involved in kidney development; required for maintaining the ureteric bud in an undifferentiated state. Involved in the development of the anterior segment of the eye. Required during erythropoiesis. Also acts as a negative regulator of innate immunity by inhibiting TLR2/TLR4 associated pattern-recognition and pro-inflammatory cytokine production. Plays an important role in regulating the circadian rhythms of plasma lipids, partially through regulating the rhythmic expression of MTTP (By similarity). Required for proper development of GnRH neurons (gonadotropin-releasing hormone expressing neurons) that control the release of reproductive hormones from the pituitary gland (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

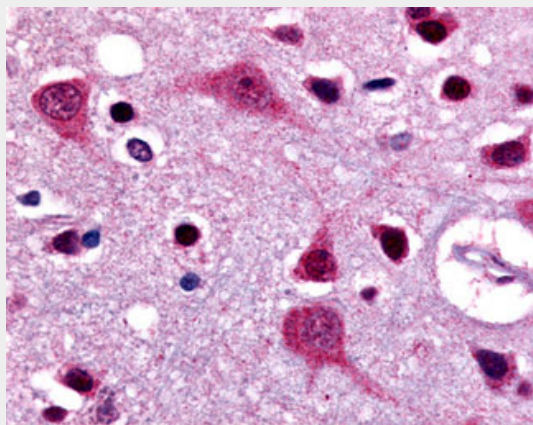
Expressed in multiple steroidogenic tissues: placenta, ovary, testis and adrenal. Expressed also in spinal cord, thyroid, stomach, trachea, heart, pancreas, kidney, prostate and spleen

GPR48 / LGR4 Antibody (N-Terminus) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

GPR48 / LGR4 Antibody (N-Terminus) - Images



Anti-LGR4 antibody ALS10680 IHC of human brain, caudate.

GPR48 / LGR4 Antibody (N-Terminus) - Background

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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. Its function as activator of the Wnt signaling pathway is required for the development of various organs, including liver, kidney, intestine, bone, reproductive tract and eye. May also act as a receptor for norrin (NDP), such results however require additional confirmation in vivo. Required during spermatogenesis to activate the Wnt signaling pathway in peritubular myoid cells. Required for the maintenance of intestinal stem cells and Paneth cell differentiation in postnatal intestinal crypts. Acts as a regulator of bone formation and remodeling. Involved in kidney development; required for maintaining the ureteric bud in an undifferentiated state. Involved in the development of the anterior segment of the eye. Required during erythropoiesis. Also acts as a negative regulator of innate immunity by inhibiting TLR2/TLR4 associated pattern-recognition and proinflammatory cytokine production. Plays an important role in regulating the circadian rhythms of plasma lipids, partially through regulating the rhythmic expression of MTTP (By similarity).

GPR48 / LGR4 Antibody (N-Terminus) - References

- Loh E.D.,et al.Biochem. Biophys. Res. Commun. 282:757-764(2001).
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Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
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