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GPR48 / LGR4 Antibody (C-Terminus)

Rabbit Polyclonal Antibody
Catalog # ALS10684

Specification

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

Application	**IHC**
Primary Accession	Q9BXB1
Reactivity	**Human, Rabbit, Monkey, Pig, Horse, Bovine, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**104kDa KDa**

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

GPR48 / LGR4 Antibody (C-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

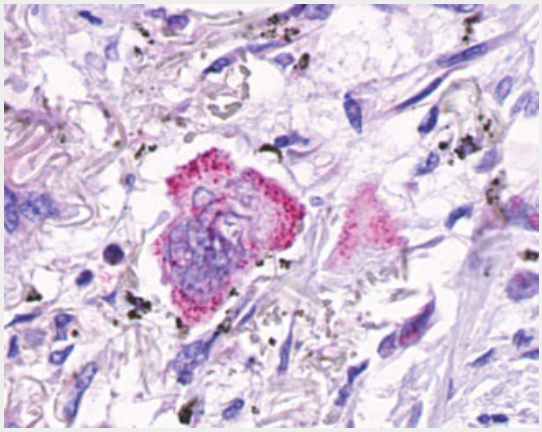
Volume
50 µl

GPR48 / LGR4 Antibody (C-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 Cytomety
- Cell Culture

GPR48 / LGR4 Antibody (C-Terminus) - Images



Anti-GPR48 / LGR4 antibody IHC of human Lung, Adenocarcinoma.

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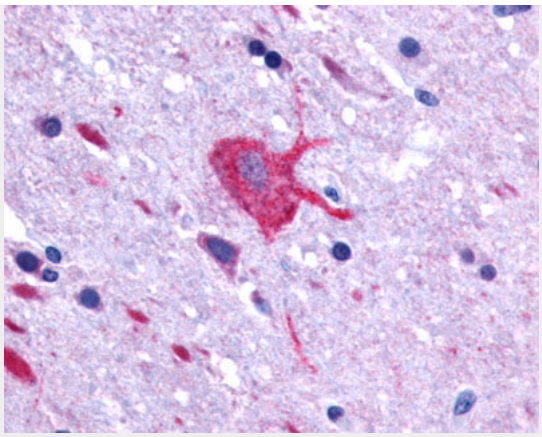

Anti-LGR4 antibody ALS10684 IHC of human brain, neurons and glia.

GPR48 / LGR4 Antibody (C-Terminus) - Background

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 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 (C-Terminus) - References

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