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Product datasheet for RC221345

GPR48 (LGR4) (NM_018490) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GPR48 (LGR4) (NM_018490) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GPR48
Synonyms:	BNMD17; GPR48
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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ORF Nucleotide Sequence:

>RC221345 representing NM_018490
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCGGGCCCGCTAGGGCTGCTCTGCTTCCTCGCCCTGGGGCTGCTCGGCTCGGCCGGGCCCAGCGGCG
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ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC221345 representing NM_018490
Red=Cloning site Green=Tags(s)

MPGPLGLLCFLALGLLGSAGPSGAAPPLCAAPCSCDGDRRVDCSGKGLTAVPEGLSAFTQALDISMNNIT
QLPEDAFKNFPFLEELQLAGNDLSFIHPKALSGLKELKVLTLQNNQLKTVPSEAIRGLSALQSLRLDANH
ITSVPEDSFEGLVQLRHLWLDDNSLTEVPVHPLSNLPTLQALTLALNKISSIPDFAFTNLSSLVVLHLHN
NKIRSLSQHCFDGLDNLETLDLNYNNLGEFPQAIKALPSLKELGFHSNSISVIPDGAFDGNPLLRTIHLY
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DHSVAQEKGTADAANVTSTLENEEHSQIIIHCTPSTGAFKPCEYLLGSWMIRLTVWFIFLVALFFNLLVI
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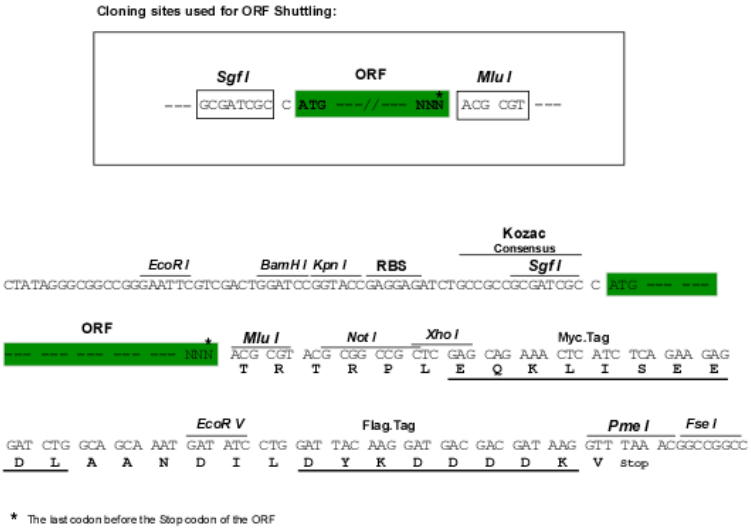
Chromatograms: https://cdn.origene.com/chromatograms/mg3795_g01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_018490

ORF Size: 2853 bp

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OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_018490.4
RefSeq Size:	5211 bp
RefSeq ORF:	2856 bp
Locus ID:	55366
UniProt ID:	Q9BXB1
Cytogenetics:	11p14.1
Domains:	7tm_1, LRRNT, LRR, LRR_TYP, LRR_BAC, LRR_PS
Protein Families:	Druggable Genome, GPCR, Transmembrane
MW:	104.3 kDa
Gene Summary:	The protein encoded by this gene is a G-protein coupled receptor that binds R-spondins and activates the Wnt signaling pathway. This Wnt signaling pathway activation is necessary for proper development of many organs of the body. [provided by RefSeq, Oct 2016]

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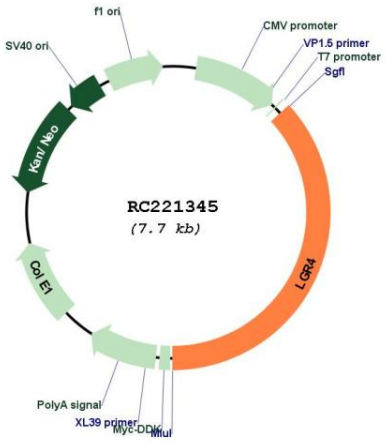
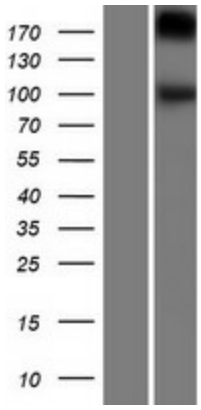
Product images:



Circular map for RC221345



Western blot validation of overexpression lysate (Cat# [LY413017]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221345 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

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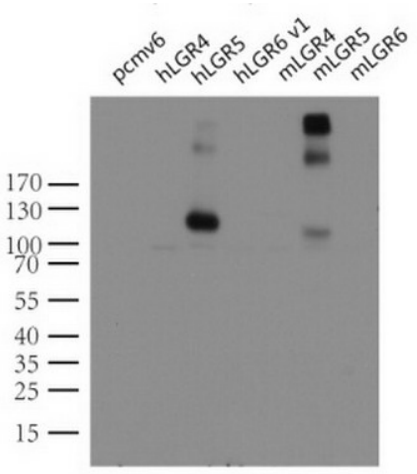

Western blot analysis of extracts (10ug) from 7 different transiently transfected HEK293T cell lysates by using anti-LGR5 monoclonal antibody (Cat# [UM800104]). Lanes: control vector pCMV6-Entry (Cat# [PS100001]); human LGR4 (Cat# RC221345), LGR5 (Cat# [RC212825]) and LGR6 (Cat# [RC219284]), and mouse LGR4 (Cat# [MR219497]), LGR5 (Cat#[MR219702]) and LGR6 (Cat# [MR224646]).

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