

## Product datasheet for RC212278

### G protein coupled receptor 30 (GPER1) (NM\_001098201) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	G protein coupled receptor 30 (GPER1) (NM_001098201) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	G protein coupled receptor 30
Synonyms:	CEPR; CMKRL2; DRY12; FEG-1; GPCR-Br; GPER; GPR30; LERGU; LERGU2; LyGPR; mER
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC212278 representing NM_001098201 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGATGTGACTTCCCAAGCCCGGGCGTGGCCCTGGAGATGTACCTAGGCACCGCGCAGCCTGCGGCC  
CCAACACCACCTCCCCGAGCTCAACCTGTCCCACCCGCTCTGGGCACCGCCCTGGCCAATGGGACAGG  
TGAGCTCTCGGAGCACCAGCAGTACGTGATCGGCCTGTTCTCTCGTGCCTCTACACCATTTCTCTTC  
CCCATCGGCTTTGTGGCAACATCCTGATCCTGGTGGTGAACATCAGCTTCCGCGAGAAGATGACCATCC  
CCGACCTGTACTCATCAACCTGGCGGTGGCGGACCTCATCCTGGTGGCCGACTCCCTCATTGAGGTGTT  
CAACCTGCACGAGCGGTACTACGACATCGCCGTCCTGTGCACCTTCATGTGCTCTTCTGCAGGTCAAC  
ATGTACAGCAGCGTCTTCTTCTCACCTGGATGAGCTTCGACCGTACATCGCCCTGGCCAGGGCCATGC  
GCTGCAGCCTGTTCCGCACCAAGCACCACGCCCGCTGAGCTGTGGCCTCATCTGGATGGATCCGTGTC  
AGCCACGCTGGTGCCTTACCAGCGTGCACCTGCAGCACACCGACGAGGCGCTTCTGTTTCGCGGAT  
GTCCGGGAGGTGCAGTGGCTCGAGGTACGCTGGGCTTCATCGTGCCTTCGCCATCATCGGCCTGTGCT  
ACTCCCTCATTGTCCGGGTGCTGGTCAGGGCGCACCGCACCGTGGGCTGCGGCCCGGCGGAGAAGGC  
GCTCCGCATGATCCTCGCGGTGGTGTGGTCTTCTTCTGCTGCTGGCTGCCGAGAAGCTTTCATCAGC  
GTGCACCTCCTGCAGCGACGACGCTGGGGCCGCTCCCTGCAAGCAGTCTTCCGCCATGCCACCCCC  
TCACGGGCCACATTGTCAACCTCGCCGCTTCTCCAACAGCTGCCTAAACCCCTCATCTACAGCTTCT  
CGGGGAGACCTTCAGGGACAAGCTGAGGCTGTACATTGAGCAGAAAAAATTTGCCGGCCCTGAACCGC  
TTCTGTACGCTGCCCTGAAGGCCGTCATTCCAGACAGCACTGAGCAGTCGGATGTGAGTTTCAGCAGTG  
CCGTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC212278 representing NM\_001098201  
 Red=Cloning site Green=Tags(s)

MDVTSQARGVGLEMYLGTAPAAPNTTSPELNLSHPLLGTALANGTGELSEHQYVIGLFLSCLYTIPLF  
 PIGFVGNILILVVNISFREKMTIPDLYFINLAVADLILVADSLIEVFNLHERYYDI AVLCTFMSLFLQVN  
 MYSSVFFLTWMSFDRIYALARAMRCSLFR TKHHARLSCGLIWMASVSATLVPFTA VHLQHTDEACFCFAD  
 VREVQWLEVTLGFIVPFAIIGLCYSLIVRVLVRAHHRHRLRPRRQKALRMILAVLVVFFVCWLPENVFIS  
 VHLLQRTQPGAAPCKQSFRRHAHPLTGHIVNLAASFNSCLNPLIYSFLGETFRDKLRLYIEQKTNLPALNR  
 FCHAALKAVIPDSTEQSDVRFSSAV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg2743\\_a01.zip](https://cdn.origene.com/chromatograms/mg2743_a01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001098201

**ORF Size:** 1125 bp

**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.

**RefSeq:** [NM\\_001098201.1](#), [NP\\_001091671.1](#)

**RefSeq Size:** 2654 bp

**RefSeq ORF:** 1128 bp

**Locus ID:** 2852

**UniProt ID:** [Q99527](#)

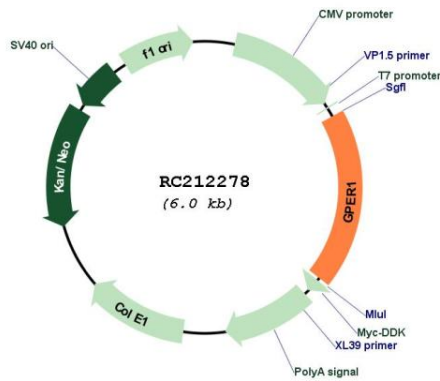
**Cytogenetics:** 7p22.3

**Protein Families:** Druggable Genome, GPCR, Transmembrane

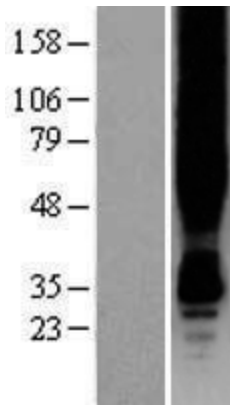
**MW:** 42.1 kDa

**Gene Summary:** This gene encodes a multi-pass membrane protein that localizes to the endoplasmic reticulum and a member of the G-protein coupled receptor 1 family. This receptor binds estrogen and activates multiple downstream signaling pathways, leading to stimulation of adenylate cyclase and an increase in cyclic AMP levels, while also promoting intracellular calcium mobilization and synthesis of phosphatidylinositol 3,4,5-trisphosphate in the nucleus. This protein therefore plays a role in the rapid nongenomic signaling events widely observed following stimulation of cells and tissues with estrogen. This receptor has been shown to play a role in diverse biological processes, including bone and nervous system development, metabolism, cognition, male fertility and uterine function. [provided by RefSeq, Aug 2017]

Product images:



Circular map for RC212278



Western blot validation of overexpression lysate (Cat# [LY419894]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC216812] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).