

Product datasheet for **RG216812**

G protein coupled receptor 30 (GPER1) (NM_001505) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	G protein coupled receptor 30 (GPER1) (NM_001505) Human Tagged ORF Clone
Tag:	TurboGFP
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-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG216812 representing NM_001505 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGATGTGACTTCCCAAGCCCGGGCGTGGCCCTGGAGATGTACCTAGGCACCGCGCAGCCTGCGGCC
CCAACACCACCTCCCCGAGCTCAACCTGTCCCACCCGCTCTGGGCACCGCCCTGGCCAATGGGACAGG
TGAGCTCTCGGAGCACCAGCAGTACGTGATCGGCCTGTTCTCTCGTGCCTCTACACCATTTCTCTTC
CCCATCGGCTTTGTGGCAACATCCTGATCCTGGTGGTGAACATCAGCTTCCGCGAGAAGATGACCATCC
CCGACCTGTACTCATCAACCTGGCGGTGGCGGACCTCATCCTGGTGGCCGACTCCCTCATTGAGGTGTT
CAACCTGCACGAGCGGTACTACGACATCGCCGTCCTGTGCACCTTCATGTGCTCTTCTGCAGGTCAAC
ATGTACAGCAGCGTCTTCTTCTCACCTGGATGAGCTTCGACCGTACATCGCCCTGGCCAGGGCCATGC
GCTGCAGCCTGTTCCGCACCAAGCACCACGCCCGGCTGAGCTGTGGCCTCATCTGGATGGATCCGTGTC
AGCCACGCTGGTGCCTTACCAGCGTGCACCTGCAGCACACCGACGAGGCGCTTCTGTTTCCGCGGAT
GTCCGGGAGGTGCAGTGGCTCGAGGTACGCTGGGCTTCATCGTGCCTTCGCCATCATCGGCCTGTGCT
ACTCCCTCATTGTCCGGGTGCTGGTCAAGGCGCACCGGACCGTGGGCTGCGGCCCGGCGGAGAAAGGC
GCTCCGCATGATCCTCGCGGTGGTGTGGTCTTCTTCTGCTGCTGGCTGCCGAGAACGTCTTCATCAGC
GTGCACCTCTGCAGCGGACGACGCTGGGGCCGCTCCCTGCAAGCAGTCTTCCGCCATGCCACCCCC
TCACGGGCCACATTGTCAACCTCGCCGCTTCTCCAACAGCTGCCTAAACCCCTCATCTACAGCTTCT
CGGGGAGACCTTCAGGGACAAGCTGAGGCTGTACATTGAGCAGAAAAAATTTGCCGGCCCTGAACCGC
TTCTGTACGCTGCCCTGAAGGCCGTCATTCCAGACAGCACTGAGCAGTCGGATGTGAGTTTCAGCAGTG
CCGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >RG216812 representing NM_001505
 Red=Cloning site Green=Tags(s)

MDVTSQARGVGLLEMYLGTAPAAPNTTSPELNLSHPLLGTALANGTGELSEHQYVIGLFLSCLYTIFFL
 PIGFVGNILILVVNISFREKMTIPDLYFINLAVADLILVADSLIEVFNLHERYYDIAVLCTFMSLFLOVN
 MYSSVFFLTWMSFDRIYALARAMRCSLFRTKHHARLSCGLIWMASVSATLVPFTAVHLQHTDEACFCFAD
 VREVQWLEVTLGFIVPFAIIGLCYSLIVRVLVRAHRHRGLRPRRQKALRMILAVLVVFFVCWLPENVFIS
 VHLLQRTQPGAAPCKQSFRAHPLTGHIVNLAASFNSCLNPLIYSFLGETFRDKLRLYIEQKTNLPALNR
 FCHAALKAVIPDSTEQSDVRFSSAV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001505

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_001505.1](#), [NP_001496.1](#)

RefSeq Size: 2776 bp

RefSeq ORF: 1128 bp

Locus ID: 2852

UniProt ID: [Q99527](#)

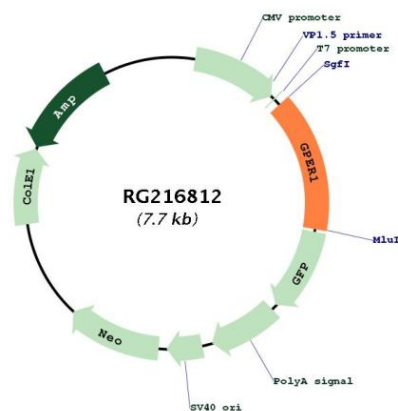
Cytogenetics: 7p22.3

Domains: 7tm_1

Protein Families: Druggable Genome, GPCR, Transmembrane

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 RG216812