

Product datasheet for **RG228290**

GDNF Receptor alpha 2 (GFRA2) (NM_001165038) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	GDNF Receptor alpha 2
Synonyms:	GDNFRB; NRTNR-ALPHA; NTNRA; RETL2; TRNR2
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG228290 representing NM_001165038
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGATCTTGGCAAACGTCTTCTGCCTCTTCTTCTTCTAGGTGAGGAGTTCTACGAAGCCTCCCCCTATG
AGCCGGTGACCTCCCGCCTCTCGGACATCTTCAGGCTTGCTTCAATCTTCTCAGGGACAGGGGCAGACCC
GGTGGTCAGCGCCAAGAGCAACCATTCGCTGGATGCTGCCAAGGCCTGCAACCTGAATGACAATGCAAG
AAGCTGCGCTCCTCCTACATCTCCATCTGCAACCGGAGATCTCGCCACCGAGCGCTGCAACCGCCGCA
AGTGCCACAAGGCCCTGCGCCAGTTCTTCGACCGGGTGCCAGGAGTACACCTACCGCATGCTCTTCTG
CTCCTGCCAAGACCAGGCGTGCGCTGAGCGCCCGCGCAAACCATCCTGCCAGCTGCTCCTATGAGGAC
AAGGAGAAGCCCACTGCCTGGACCTGCGTGCGGTGTGCCGACTGACCACCTGTGTCGGTCCCGGCTGG
CCGACTTCCATGCCAATTGTCGAGCCTCTACCAGACGGTCACCGCTGCCCTGCGGACAATTACCAGGC
GTGTCTGGGCTCTTATGCTGGCATGATTGGGTTTGACATGACACCTAACTATGTGGACTCCAGCCCCACT
GGCATCGTGGTGTCCCCCTGGTGCAGCTGTCTGGCAGCGGGAACATGGAGGAGGAGTGTGAGAAGTTCC
TCAGGGACTTCACCGAGAACCATGCCTCCGGAACGCCATCCAGGCCTTTGGCAACGGCACGGACGTGAA
CGTGTCCCCAAAAGGCCCTCGTTCCAGGCCACCCAGGCCCTCGGGTGGAAGACGCCTTCTTTGCCA
GATGACCTCAGTGACAGTACCAGCTTGGGGACCAAGTGTATCACCACCTGCACGTCTGTCCAGGAGCAGG
GGCTGAAGGCCAACAACTCCAAGAGTTAAGCATGTGCTTACAGAGCTCACGACAAATATCATCCAGG
GAGTAACAAGGTGATCAAACCTAACTCAGGCCCCAGCAGAGCCAGACCGTCCGGCTGCCTTGACCGTGCTG
TCTGTCCTGATGCTGAACTGGCCTTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence:

>RG228290 representing NM_001165038

Red=Cloning site Green=Tags(s)

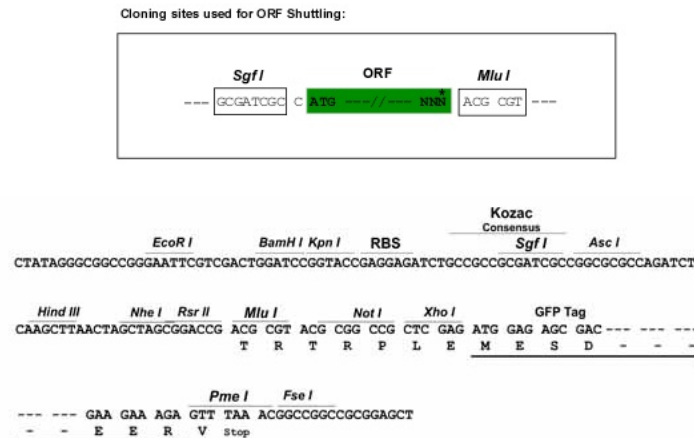
MILANVFCLFFFLGEEFYEASPYEPVTSRLSDIFRLASIFSGTGADPVVSAKSNHCLDAAKACNLNDNCK
KLRSSYISICNREISPTERCNRRKCHKALRQFFDRVPSEYTYRMLFCSCQDQACAERRRQTILPSCSYED
KEKPNCLDLRGVCRTHLCSRSLADFHANCASYQTVTSCPADNYQACLSYAGMIGFDMTPNYVDSSPT
GIVVSPWCSCRGSGNMEECEKFLRDFTENPCLRNAIQAFNGTVDVNVSPKGPSFQATQAPRVEKTPSLP
DDLSDSTSLGTSVITTTCTSVQEQGLKANNSKELSMCFTELTNNIIPGSNKVIKPNSGPSRARPSAALTVL
SVLMLKLAL

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN:

NM_001165038

ORF Size:

1077 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:

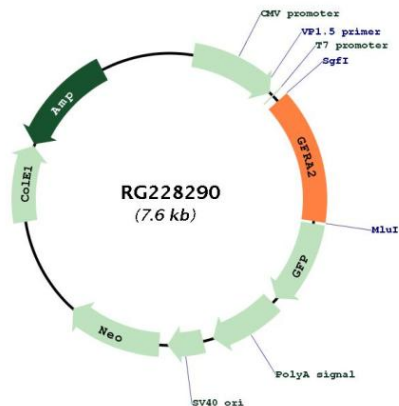
This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_001165038.2</u>
RefSeq Size:	3061 bp
RefSeq ORF:	1080 bp
Locus ID:	2675
UniProt ID:	<u>O00451</u>
Cytogenetics:	8p21.3
Protein Families:	Druggable Genome
Gene Summary:	Glial cell line-derived neurotrophic factor (GDNF) and neurturin (NTN) are two structurally related, potent neurotrophic factors that play key roles in the control of neuron survival and differentiation. The protein encoded by this gene is a member of the GDNF receptor family. It is a glycosylphosphatidylinositol(GPI)-linked cell surface receptor for both GDNF and NTN, and mediates activation of the RET tyrosine kinase receptor. This encoded protein acts preferentially as a receptor for NTN compared to its other family member, GDNF family receptor alpha 1. This gene is a candidate gene for RET-associated diseases. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2009]

Product images:



Circular map for RG228290