

Product datasheet for RC228263

GDNF Receptor alpha 2 (GFRA2) (NM_001165039) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GDNF Receptor alpha 2 (GFRA2) (NM_001165039) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GDNF Receptor alpha 2
Synonyms:	GDNFRB; NRTNR-ALPHA; NTNRA; RETL2; TRNR2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC228263 representing NM_001165039 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGATCTTGGCAAACGTCTTCTGCCTCTTCTTTCTAGGGACAGGGGCAGACCCGGTGGTCAGCGCCA
AGAGCAACCATTGCCTGGATGCTGCCAAGGCTGCAACCTGAATGACAACGCAAGAAGCTGCGCTCCTC
CTACATCTCCATCTGCAACCGGAGATCTCGCCACCGAGCGCTGCAACCGCCGCAAGTCCACAAGGCC
CTGCGCCAGTTCTCGACCGGTGCCAGCGAGTACACCTACCGCATGCTTCTGCTCCTGCCAAGACC
AGGCGTGGCTGAGCGCCGCCGCAACCATCCTGCCAGCTGCTCCTATGAGGACAAGGAGAAGCCAA
CTGCCTGGACCTGCGTGGCGTGTGCCGGACTGACCACCTGTGTCGGTCCCGGCTGGCCGACTTCCATGCC
AATTGTCGAGCCTCCTACCAGACGGTACCAGCTGCCCTGCGGACAATTACCAGGCGTGTCTGGGCTCTT
ATGCTGGCATGATTGGGTTTGACATGACACCTAATATGTGGACTCCAGCCCCACTGGCATCGTGGTGTG
CCCCTGGTGCAGCTGTGCTGGCAGCGGGAACATGGAGGAGGAGTGTGAGAAGTTCCTCAGGGACTCACC
GAGAACCATGCCTCCGGAACGCCATCCAGGCCTTTGGCAACGGCACGGACGTGAACGTGTCCCAAAAG
GCCCTCGTTCAGGCCACCCAGGCCCTCGGGTGGAGAAGACGCCTTCTTGGCAGATGACCTCAGTGA
CAGTACCAGCTTGGGGACCAGTGTATCACCACCTGCACGTCTGTCCAGGAGCAGGGGCTGAAGGCCAAC
AACTCAAAGAGTTAAGCATGTGCTTACAGAGCTCACGACAAATATCATCCAGGGAGTAACAAGGTGA
TCAAACCTAACTAGGCCCCAGCAGACGCCAGACCGTCCGGTGCCTTGACCGTGTCTGTCTGATGCT
GAAACTGGCCTTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC228263 representing NM_001165039
 Red=Cloning site Green=Tags(s)

MILANVFCLFFFLGTGADPVVSAKSNHCLDAAKACNLNDNCKLRSSYISICNREISPTERCNRRKCHKA
 LRQFFDRVPSEYTYRMLFCSCQDQACAERRRQTILPSCSYEDKEKPNCLDLRGVCRDHLCRSRLADFHA
 NCRASYQTVTSCPADNYQACLGSYAGMIGFDMTPNYVDSPTGI VVSPWPCSCRGSGNMEEECEKFLRDF
 ENPCLRNAIQAFNGTDVNVSPKGPSFQATQAPRVEKTPSLPDDLSDSTSLGTSVITTTCTSVQEQLKAN
 NSKELSMCFTELTTNIIPGSNKVIKPNSGPSRARPSAALTVLSVLMKLAL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001165039

ORF Size: 993 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_001165039.2](#)

RefSeq ORF: 996 bp

Locus ID: 2675

UniProt ID: [O00451](#)

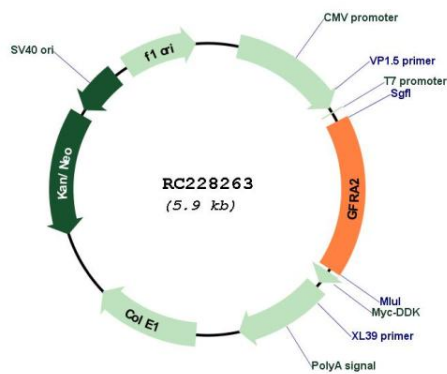
Cytogenetics: 8p21.3

Protein Families: Druggable Genome

MW: 36.3 kDa

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 RC228263