

Product datasheet for **RC216462**

Endothelin B Receptor (EDNRB) (NM_003991) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Endothelin B Receptor (EDNRB) (NM_003991) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Endothelin B Receptor
Synonyms:	ABCDS; ET-B; ET-BR; ETB; ETB1; ETBR; ETRB; HSCR; HSCR2; WS4A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC216462 representing NM_003991
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCAGCCGCCTCCAAGTCTGTGCGGACGCGCCCTGGTTGCGCTGTTCTTGCCCTGCGGCCTGTCGCGGA
 TCTGGGGAGAGGAGAGAGGCTTCCCGCCTGACAGGGCCACTCCGCTTTTGCAAACCGCAGAGATAATGAC
 GCCACCCACTAAGACCTTATGGCCCAAGGGTTCCAACGCCAGTCTGGCGCGGTCGTTGGCACCTGCGGAG
 GTGCCTAAAGGAGACAGGACGGCAGGATCTCCGCCACGCACCATCTCCCTCCCCGTGCCAAGGACCCA
 TCGAGATCAAGGAGACTTCAAATACATCAACACGGTTGTCTGCTGCTTGTGTTCTGCTGTTGGGATCAT
 CGGGAATCCACACTTCTGAGAATTATCTACAAGAACAAGTGCATGCGAAACGGTCCCAATATCTTGATC
 GCCAGCTTGGCTCTGGGAGACCTGCTGCACATCGTCATTGACATCCCTATCAATGTCTACAAGCTGCTGG
 CAGAGGACTGGCCATTTGGAGCTGAGATGTGTAAGCTGGTGCCTTCATACAGAAAGCCTCCGTGGGAAT
 CACTGTGCTGAGTCTATGTGCTGAGTATTGACAGATATCGAGCTGTTGCTTCTTGAGTAGAATTA
 GGAATTGGGGTTCCAAAATGGACAGCAGTAGAAATGTTTTGATTGGGTGGTCTCTGTGGTTCTGGCTG
 TCCTGAAGCCATAGTTTTGATATAATTACGATGGACTACAAAGGAAGTTATCTGCGAATCTGCTTGTCT
 TCATCCCGTTTCAAGACAGCTTTCATGCAAGTTTACAAGACAGCAAAGATTGGTGGCTATTAGTTTCT
 TATTTCTGCTTGGCATTGGCCATCACTGCATTTTTTATACTAATGACCTGTGAAATGTTGAGAAAGA
 AAAGTGGCATGCAGATTGCTTTAAATGATCACCTAAAGCAGAGACGGGAAGTGGCCAAAACCGTCTTTTG
 CCTGGTCTTGTCTTGGCCCTGCTGGCTTCCCTTACCTCAGCAGGATTCTGAAGCTCACTCTTTAT
 AATCAGAATGATCCCAATAGATGTGAACCTTTGAGCTTCTGTTGGTATTGGACTATATTGGTATCAACA
 TGGCTTCACTGAATTCCTGCATTAACCAATTGCTCTGTATTTGGTGGAGCAAAGATTCAAAAACCTGCTT
 TAAGGCTGGGCCACATGTTGAAATAAGCTAGTAATGTTGTTTTCTGCAATATTGAATGTGATGGTACA
 GTAAACCAAAACCAACAATGTGGCCAGAAAGAAAGAGCAATAATAAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC216462 representing NM_003991
 Red=Cloning site Green=Tags(s)

MQPPPSLCGRALVALVLACGLSRIWGEERGFPPDRATPLLQTAEIMTPPTKTLWPKGSNASLARS LAPAE
 VPKGDRTAGSPRTISPPPCQGP I E I K E T F K Y I N T V V S C L V F V L G I I G N S T L L R I I Y K N K M R N G P N I L I
 A S L A L G D L L H I V I D I P I N V Y K L L A E D W P F G A E M C K L V P F I Q K A S V G I T V L S L C A L S I D R Y R A V A S W S R I K
 G I G V P K W T A V E I V L I W V S V V L A V P E A I G F D I I T M D Y K G S Y L R I C L L H P V Q K T A F M Q F Y K T A K D W W L F S F
 Y F C L P L A I T A F F Y T L M T C E M L R K K S G M Q I A L N D H L K Q R R E V A K T V F C L V L V F A L C W L P L H L S R I L K L T L Y
 N Q N D P N R C E L L S F L L V L D Y I G I N M A S L N S C I N P I A L Y L V S K R F K N C F K A G P H V G N K L V M L F S V N I E C D G T
 V N Q N P T M W P E R K S N N N

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8059_g10.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_003991

ORF Size: 1308 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_003991.3](#), [NP_003982.1](#)

RefSeq Size: 1578 bp

RefSeq ORF: 1311 bp

Locus ID: 1910

UniProt ID: [P24530](#)

Cytogenetics: 13q22.3

Domains: 7tm_1

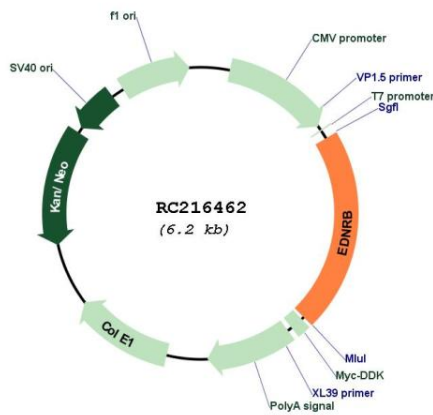
Protein Families: Druggable Genome, GPCR, Transmembrane

Protein Pathways: Calcium signaling pathway, Melanogenesis, Neuroactive ligand-receptor interaction

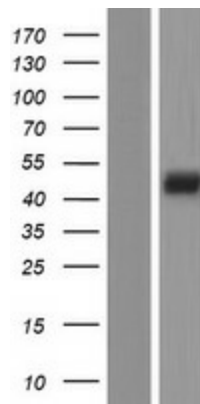
MW: 48.71 kDa

Gene Summary: The protein encoded by this gene is a G protein-coupled receptor which activates a phosphatidylinositol-calcium second messenger system. Its ligand, endothelin, consists of a family of three potent vasoactive peptides: ET1, ET2, and ET3. Studies suggest that the multigenic disorder, Hirschsprung disease type 2, is due to mutations in the endothelin receptor type B gene. Alternative splicing and the use of alternative promoters results in multiple transcript variants. [provided by RefSeq, Oct 2016]

Product images:



Circular map for RC216462



Western blot validation of overexpression lysate (Cat# [LY418304]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216462 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).