

## Product datasheet for **RG236453**

### Endothelin 3 (EDN3) (NM\_001302456) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Endothelin 3 (EDN3) (NM\_001302456) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** EDN3  
**Synonyms:** ET-3; ET3; HSCR4; PPET3; WS4B  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG236453 representing NM\_001302456.  
Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGAGCCGGGGCTGTGGCTCCTTTTCGGGCTCACAGTGACCTCCGCCGAGGATTCGTGCCTTGCTCC
CAGTCTGGGGATGCTGGCAGGCGCGCGTGTCCCAGGCCCCACTGCAGCCAGATCTGAGGGGACTGT
GAAGAGACTGTGGCTGGCCCTGGCGAGGAGACTGTGGCTGGCCCTGGCGAGGGGACTGTGGCCCCGACA
GCACTGCAGGGTCCAAGCCCTGGAAGCCCTGGCAGGAGCAGGCCGCCGAGGGGGCCCTGAGCACCAC
CGATCCAGGCGCTGCACGTGCTTCACTACAAGGACAAGGAGTGTGTCTACTATTGCCACCTGGACATC
ATTTGGATCAACTCCCGAACAGACGGTGCCCTATGGACTGTCCAACACAGAGGAAGCTTCCGGGGC
AAGAGGTCTGCGGGCCACTTCCAGGGAATCTGCAGCTCTCACATCGGCCACACTTGCCTGCGCTGT
GTGGGGAGATATGACAAGCCTGCCTGCACTTTTGCACCCAAACTCTGGACGTCAGCAGGTTGAAGTCA
AGGACCAACAAAGCAAGCAGGCTT
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAAAC
```

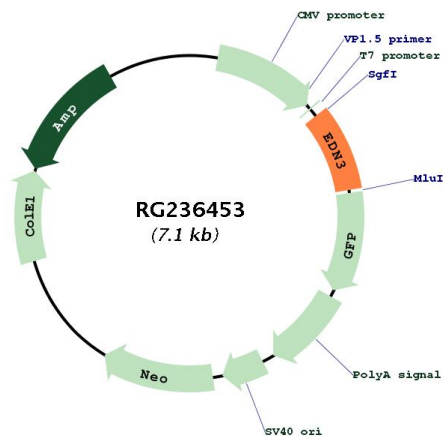
**Protein Sequence:** >Peptide sequence encoded by RG236453  
Blue=ORF Red=Cloning site Green=Tag(s)

```
MEPGLWLLFGLTVTSAAGFVPCSQSGDAGRRGVSQAPTAARSEGDCEETVAGPGEETVAGPGEETVAPT
ALQGPSPGSPGQEQAAEQAPEHRSRRCTCFYKDKCEVYYCHLDIWIWINTPEQTVPYGLSNYRGSFRG
KRSAGPLPGLNLQLSHRPHLRACVGRYDKACLHFCTQTLDVDLSRLKSRTNKASRL
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

**Restriction Sites:** SgfI-MluI



**Cloning Scheme:**

**Plasmid Map:**


**ACCN:** NM\_001302456

**ORF Size:** 576 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).

RefSeq:	<a href="#">NM_001302456.2</a>
RefSeq Size:	2630 bp
RefSeq ORF:	579 bp
Locus ID:	1908
UniProt ID:	<a href="#">P14138</a>
Cytogenetics:	20q13.32
Protein Families:	Druggable Genome, Secreted Protein
MW:	21 kDa
Gene Summary:	<p>The protein encoded by this gene is a member of the endothelin family. Endothelins are endothelium-derived vasoactive peptides involved in a variety of biological functions. The active form of this protein is a 21 amino acid peptide processed from the precursor protein. The active peptide is a ligand for endothelin receptor type B (EDNRB). The interaction of this endothelin with EDNRB is essential for development of neural crest-derived cell lineages, such as melanocytes and enteric neurons. Mutations in this gene and EDNRB have been associated with Hirschsprung disease (HSCR) and Waardenburg syndrome (WS), which are congenital disorders involving neural crest-derived cells. Altered expression of this gene is implicated in tumorigenesis. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Oct 2014]</p>