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Product datasheet for RC236495

Endothelin 3 (EDN3) (NM_001302455) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Endothelin 3 (EDN3) (NM_001302455) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EDN3
Synonyms:	ET-3; ET3; HSCR4; PPET3; WS4B
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC236495 representing NM_001302455 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGAGCCGGGGCTGTGGCTCCTTTTCGGGCTCACAGTGACCTCCGCCGCAGGATTCGTGCCTTGCTCCC AGTCTGGGGATGCTGGCAGGCGCGGCGTGTCCCAGGCCCCCACTGCAGCCAGATCTGAGGGGGACTGTGA AGAGACTGTGGCTGGCCCTGGCGAGGAGACTGTGGCTGGCCCTGGCGAGGGGACTGTGGCCCCGACAGCA CTGCAGGGTCCAAGCCCTGGAAGCCCTGGGCAGGAGCAGGCGGCCGAGGGGGCCCCTGAGCACCACCGAT CCAGGCGCTGCACGTGCTTCACCTACAAGGACAAGGAGTGTGTCTACTATTGCCACCTGGACATCATTTG GATCAACACTCCCGAACAGACGGTGCCCTATGGACTGTCCAACTACAGAGGAAGCTTCCGGGGCAAGAGG TCTGCGGGGCCACTTCCAGGGAATCTGCAGCTCTCACATCGGCCACACTTGCGCTGCGCTTGTGTGGGGA GATATGACAAGGCCTGCCTGCACTTTTGCACCCAAACTCTGGACGTCAGCAGTAATTCAAGGACGGCAGA AAAAACAGACAAAGAAGAGGAAGGGAAGACAGGT ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA
Protein Sequence:	>RC236495 representing NM_001302455 Red=Cloning site Green=Tags(s) MEPGLWLLFGLTVTSAAGFVPCSQSGDAGRRGVSQAPTAARSEGDCEETVAGPGEETVAGPGEGTVAPTA LQGPSPGSPGQEQAAEGAPEHHRSRRCTCFTYKDKECVYYCHLDIIWINTPEQTVPYGLSNYRGSFRGKR SAGPLPGNLQLSHRPHLRCACVGRYDKACLHFCTQTLDVSSNSRTAEKTDKEEEGKTG TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Restriction Sites:	SgfI-MluI

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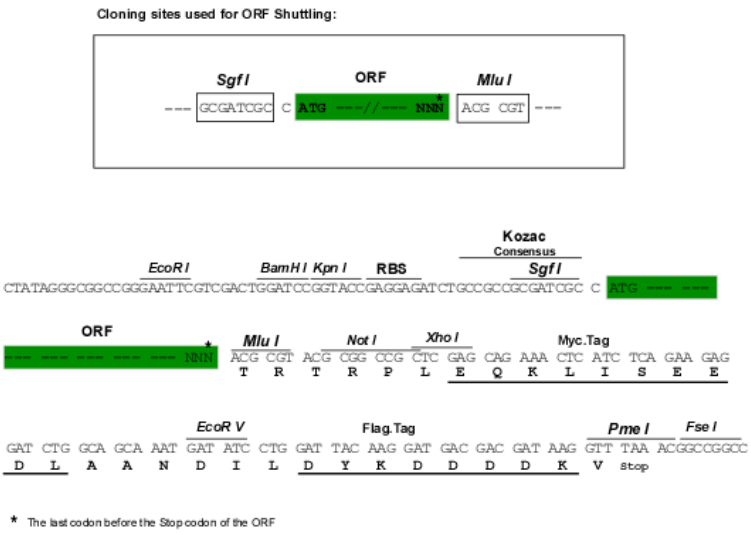
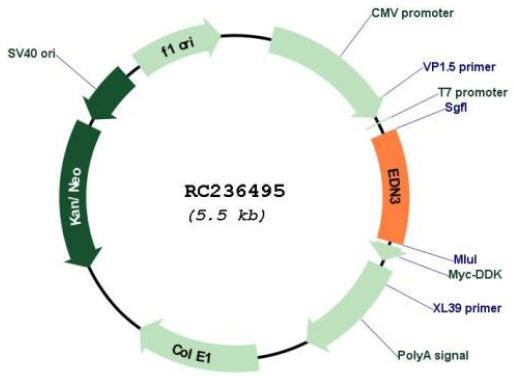
Cloning Scheme:



Plasmid Map:



ACCN:	NM_001302455
ORF Size:	594 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_001302455.2

RefSeq Size: 2680 bp

RefSeq ORF: 597 bp

Locus ID: 1908

UniProt ID: P14138

Cytogenetics: 20q13.32

Protein Families: Druggable Genome, Secreted Protein

MW: 21.6 kDa

Gene Summary: 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]