

Product datasheet for SC334347

OriGene Technologies, Inc.

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Endothelin 3 (EDN3) (NM_001302456) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Endothelin 3 (EDN3) (NM_001302456) Human Untagged Clone

Tag: Tag Free Symbol: EDN3

Synonyms: ET-3; ET3; HSCR4; PPET3; WS4B

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM_001302456, the custom clone sequence may differ by one or

more nucleotides

ATGGAGCCGGGGCTGTGGCTCCTTTTCGGGCTCACAGTGACCTCCGCCGCAGGATTCGTGCCTTGCTCCC
AGTCTGGGGATGCTGGCAGGCGGCGGTGTCCCAGGCCCCACTGCAGCCAGATCTGAGGGGGACTGTGA
AGAGACTGTGGCTGGCCCTGGCGAGGAGACTGTGGCCCCGACAGCA
CTGCAGGGTCCAAGCCCTGGAAGCCCTGGGCAGGAGCAGCAGCCGACGGCCGAGGGGGCCCCTGAGCACCACCGAT
CCAGGCGCTGCACGTGCTTCACCTACAAGGACAAGGAGTGTGTCTACTATTGCCACCTGGACATCATTTG
GATCAACACTCCCGAACAGACGGTGCCCTATGGACTGTCCAACTACAGAGGAAGCTTCCGGGGCAAGAGG
TCTGCGGGGGCCACTTCCAGGGAATCTGCAGCTCTCACATCGGCCACACTTTGCGCTGCGCTTGTGTGGGGA
GATATGACAAGGCCTGCCTGCACTTTTGCACCCCAAACTCTGGACGTCAGCAGGTTGAAGTCAAGGACCAA
CAAAGCAAGCAAGCAGGCTTTAG

Restriction Sites: Sgfl-Mlul

ACCN: NM 001302456

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

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: <u>NM 001302456.1</u>, <u>NP 001289385.1</u>

 RefSeq Size:
 2630 bp

 RefSeq ORF:
 579 bp

 Locus ID:
 1908

 UniProt ID:
 P14138

 Cytogenetics:
 20q13.32

Protein Families: Druggable Genome, Secreted Protein

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]

Transcript Variant: This variant (6) lacks an exon in the 3' coding region, which results in a frameshift and an early stop codon, compared to variant 4. The encoded isoform (5) is shorter

and has a distinct C-terminus, compared to isoform 1.