

Product datasheet for SC333495

OriGene Technologies, Inc.

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alpha Defensin 1 (DEFA1B) (NM_001302265) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: alpha Defensin 1 (DEFA1B) (NM_001302265) Human Untagged Clone

Tag: Tag Free

Symbol: alpha Defensin 1
Synonyms: HNP-1; HP-1; HP1

Mammalian Cell

Selection:

Neomycin

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

Fully Sequenced ORF: >SC333495 representing NM_001302265.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

CAGGGAAGACTCTGGGCATTCTGCTGCTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul

ACCN: NM_001302265

Insert Size: 306 bp

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 001302265.1</u>

RefSeq Size: 542 bp
RefSeq ORF: 306 bp
Locus ID: 728358
Cytogenetics: 8p23.1

Protein Families: Druggable Genome

MW: 11 kDa

Gene Summary: Defensins are a family of antimicrobial and cytotoxic peptides thought to be involved in host

defense. They are abundant in the granules of neutrophils and also found in the epithelia of mucosal surfaces such as those of the intestine, respiratory tract, urinary tract, and vagina. Members of the defensin family are highly similar in protein sequence and distinguished by a conserved cysteine motif. The protein encoded by this gene, defensin, alpha 1, is found in the microbicidal granules of neutrophils and likely plays a role in phagocyte-mediated host defense. Several alpha defensin genes are clustered on chromosome 8. This gene differs from

defensin, alpha 3 by only one amino acid. This gene and the gene encoding defensin, alpha 3

are both subject to copy number variation. Two transcript variants encoding different

isoforms have been found for this gene. [provided by RefSeq, Oct 2014]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer

isoform (1).