

### Product datasheet for RG206426

#### OriGene Technologies, Inc.

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## alpha Defensin 1 (DEFA1B) (NM\_001042500) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: alpha Defensin 1 (DEFA1B) (NM 001042500) Human Tagged ORF Clone

Tag: TurboGFP

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

Mammalian Cell

Selection:

Neomycin

**Vector:** pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG206426 representing NM\_001042500 Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGAGGACCCTCGCCATCCTTGCTGCCATTCTCCTGGTGGCCCTGCAGGCCCAGGCTGAGCCACTCCAGGCAAGAGCTGATGAGCTTGCTGCAGGCCAGAGAGTTGCTGCAGGAGCAGAGTTGCAGAAGCATCCCAGAAGTGGTTGTTTCCCTTGCATGGGACGAAAGCTTGGCTCCAAAGCATCCAGGCTCAAGGAAAAACATGGACTGCTATTGCAGAATACCAGCGTGCATTTGCAGGAAACATCTGCT

 $\mathsf{GC}$ 

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG206426 representing NM\_001042500

Red=Cloning site Green=Tags(s)

MRTLAILAAILLVALQAQAEPLQARADEVAAAPEQIAADIPEVVVSLAWDESLAPKHPGSRKNMDCYCRI

PACIAGERRYGTCIYQGRLWAFCC

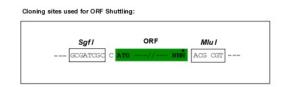
TRTRPLE - GFP Tag - V

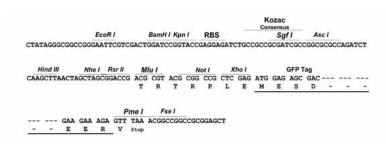
**Restriction Sites:** Sgfl-Mlul





#### **Cloning Scheme:**





**ACCN:** NM\_001042500

ORF Size: 282 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: <u>NM 001042500.1</u>, <u>NP 001035965.1</u>

RefSeq Size: 498 bp RefSeq ORF: 285 bp



 Locus ID:
 728358

 UniProt ID:
 P59665

 Cytogenetics:
 8p23.1

**Protein Families:** Druggable Genome

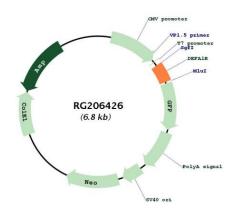
**Gene Summary:** Defensins are a family of antimicrobial and cytotoxic peptides thought to be involved in host

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]

# **Product images:**



Circular map for RG206426