

## Product datasheet for **SC321787**

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

#### Product data:

<b>Product Type:</b>	Expression Plasmids
<b>Product Name:</b>	alpha Defensin 1 (DEFA1B) (NM_001042500) Human Untagged Clone
<b>Tag:</b>	Tag Free
<b>Symbol:</b>	alpha Defensin 1
<b>Synonyms:</b>	HNP-1; HP-1; HP1
<b>Mammalian Cell Selection:</b>	Neomycin
<b>Vector:</b>	pCMV6-AC (PS100020)
<b>E. coli Selection:</b>	Ampicillin (100 ug/mL)
<b>Fully Sequenced ORF:</b>	>OriGene sequence for NM_001042500.1 GACCTGGGACAGAGGACTGCTGTCTGCCCTCTCTGGTCACCTGCCTAGCTAGAGGATCT GTGACCCAGCCATGAGGACCCCTGCCATCCTTGCTGCCATTCTCCTGGTGGCCCTGCAG GCCCAGGCTGAGCCACTCCAGGCAAGAGCTGATGAGTTGCTGCAGCCCCGGAGCAGATT GCAGCGGACATCCAGAAGTGGTTGTTCCCTTGATGGGACGAAAGCTTGGCTCCAAG CATCCAGGCTCAAGGAAAAACATGGACTGCTATTGCAGAATACCAGCGTGCATTGCAGGA GAACGTCGCTATGGAACCTGCATCTACCAGGGAAGACTCTGGGCATTCTGCTGCTGAGCT TGCAGAAAAAGAAAAATGAGCTCAAAATTTGCTTTGAGAGCTACAGGGAATTGCTATTAC TCCTGTACCTTCTGCTCAATTTCTTTCTCATCTCAAATAAATGCCTTGTACAAGAAA AA AAAAAAAAAAAAAAAAAAAA
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_001042500
<b>OTI Disclaimer:</b>	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).
<b>OTI Annotation:</b>	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
<b>Components:</b>	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).



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**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\\_001042500.1](#), [NP\\_001035965.1](#)

**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]  
Transcript Variant: This variant (2) lacks an alternate exon in the 5' coding region and initiates translation at a downstream start site compared to variant 1. The resulting isoform (2) is shorter at the N-terminus compared to isoform 1.