

## Product datasheet for RC213236

### Neutrophil defensin 4 (DEFA4) (NM\_001925) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Neutrophil defensin 4 (DEFA4) (NM\_001925) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Neutrophil defensin 4  
**Synonyms:** DEF4; HNP-4; HP-4; HP4  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC213236 representing NM\_001925  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGGATTATCGCCCTCCTCGCTGCTATTCTCTTGGTAGCCCTCCAGGTCCGGGCAGGCCCACTCCAGG  
CAAGAGGTGATGAGGCTCCAGGCCAGGAGCAGCGTGGGCCAGAAGACCAGGACATATCTATTTCTTTGC  
ATGGGATAAAAGCTCTGCTCTTCAGGTTTCAGGCTCAACAAGGGCATGGTCTGCTCTTGACAGATTAGTA  
TTCTGCCGGCGAACAGAACTTCGTGTTGGGAAGCTCCTCATTGGTGGTGTGAGTTTCACATACTGCTGCA  
CGCGTGTGAT

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
TGGATTACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC213236 representing NM\_001925  
Red=Cloning site Green=Tags(s)  
MRIIALLAAILLVALQVRAGPLQARGDEAPGQEQRGPEDQDISISFAWDKSSALQVSGSTRGMVCSRLV  
FCRRETLRVGNCLIGGVSFYCCTRVD

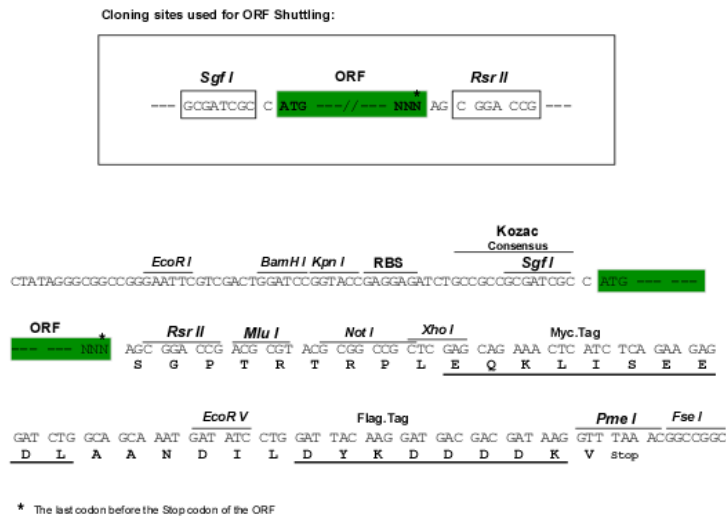
**SGP**TRRRL**EQKLISEEDLAANDILDYKDDDDK**V

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8115\\_a10.zip](https://cdn.origene.com/chromatograms/mk8115_a10.zip)

**Restriction Sites:** SgfI-RsrII



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**Cloning Scheme:**


**ACCN:** NM\_001925

**ORF Size:** 291 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\\_001925.3](#)

**RefSeq Size:** 542 bp

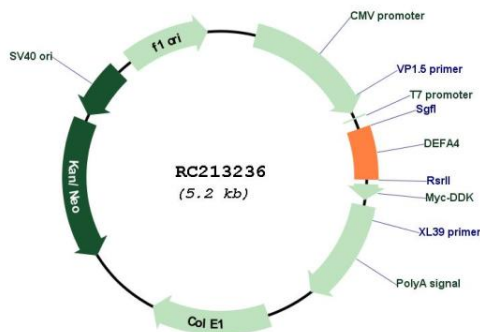
**RefSeq ORF:** 294 bp

**Locus ID:** 1669

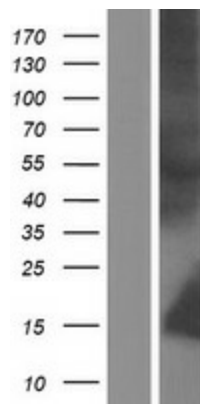
**UniProt ID:** [P12838](#)  
**Cytogenetics:** 8p23.1  
**Domains:** Defensin\_propep, DEFSN, defensins  
**Protein Families:** Secreted Protein  
**MW:** 10.5 kDa

**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. Several alpha defensin genes are clustered on chromosome 8. This gene differs from other genes of this family by an extra 83-base segment that is apparently the result of a recent duplication within the coding region. The protein encoded by this gene, defensin, alpha 4, is found in the neutrophils; it exhibits corticostatic activity and inhibits corticotropin stimulated corticosterone production. [provided by RefSeq, Oct 2014]

### Product images:



Circular map for RC213236



Western blot validation of overexpression lysate (Cat# [LY419660]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213236 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).