

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)

TTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGATCGCC

ATGAGGATTATCGCCCTCCTCGCTGCTATTCTCTTGGTAGCCCTCCAGGTCCGGGCAGGCCCACTCCAGG
 CAAGAGGTGATGAGGCTCCAGGCCAGGAGCAGCGTGGGCCAGAAGACCAGGACATATCTATTTCTTTGC
 ATGGGATAAAAGCTCTGCTCTTCAGGTTTCAGGCTCAACAAGGGGCATGGTCTGCTCTTGCAATTAGTA
 TTCTGCCGGCGAACAGAACTTCGTGTGGGAAGTGCCTCATTGGTGTGAGTTTCACATACTGCTGCA
 CGCGTGTGAT

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC213236 representing NM_001925
Red=Cloning site Green=Tags(s)
 MRIIALLAAILLVALQVRAGPLQARGDEAPGQEQRGPEQDISISFAWDKSSALQVSGSTRGMVCSRLV
 FCRRTEL RVGNCLIGGVSFYCCTRVD

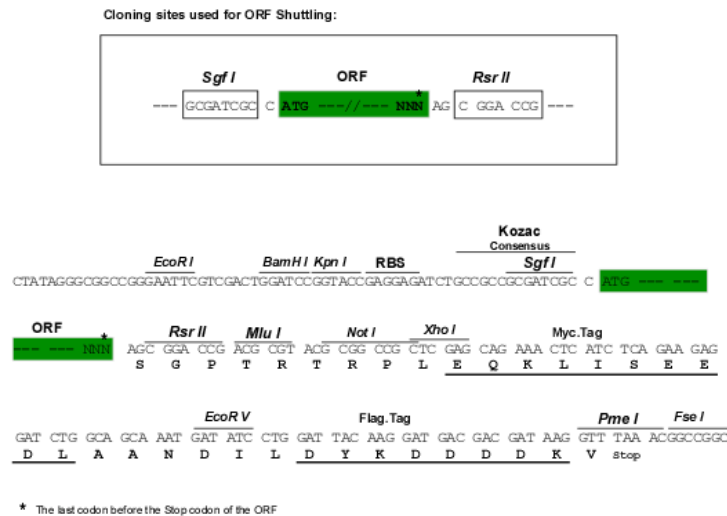
SGPTRTRRLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8115_a10.zip

Restriction Sites: SgfI-RsrII


[View online »](#)

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001925.3](#)

RefSeq Size: 542 bp

RefSeq ORF: 294 bp

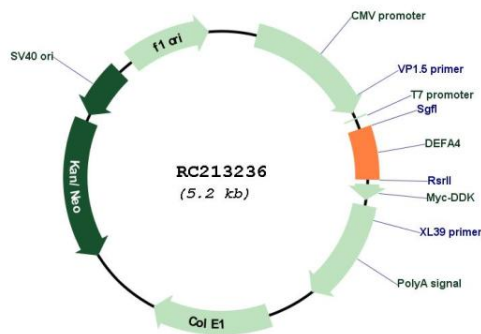
Locus ID: 1669
UniProt ID: [P12838](#)
Cytogenetics: 8p23.1
Domains: Defensin_propep, DEFSN, defensins

Protein Families: Secreted Protein

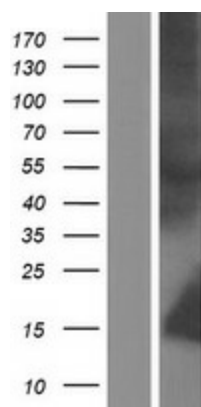
MW: 10.5 kDa

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]).