

Product datasheet for RG223145

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Defensin alpha 3 (DEFA3) (NM_005217) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Defensin alpha 3 (DEFA3) (NM_005217) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: DEFA3

Synonyms: DEF3; HNP-3; HP-3; HP-3

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-AC-GFP (PS100010)

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

ORF Nucleotide >RG223145 representing NM_005217

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGAGGACCCTCGCCATCCTTGCTGCCATTCTCCTGGTGGCCCTGCAGGCCCAGGCTGAGCCACTCCAGGCAAGAGCTGATGAGGCTGCAGCCCCCGGAGCAGATTGCAGCGGACATCCCAGAAGTGGTTGTTTCCCTTGCATGGGACGAAAGCTTGGCTCCAAAGCATCCAGGCTCAAGGAAAAACATGGACTGCTATTGCAGAATACCAGCGTGCATTGCAGGAAACGTCGCTATGGAACCTGCATCTACCAGGGAAGACTCTGGGCATTCTGCT

GC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG223145 representing NM_005217

Red=Cloning site Green=Tags(s)

MRTLAILAAILLVALQAQAEPLQARADEVAAAPEQIAADIPEVVVSLAWDESLAPKHPGSRKNMDCYCRI

PACIAGERRYGTCIYQGRLWAFCC

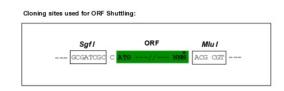
TRTRPLE - GFP Tag - V

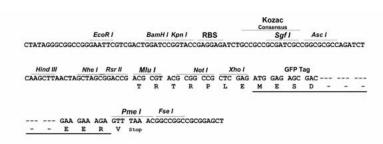
Restriction Sites: Sgfl-Mlul



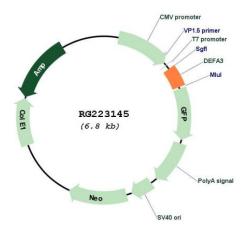


Cloning Scheme:





Plasmid Map:



ACCN: NM_005217

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



Defensin alpha 3 (DEFA3) (NM_005217) Human Tagged ORF Clone - RG223145

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 005217.4</u>

 RefSeq Size:
 487 bp

 RefSeq ORF:
 285 bp

 Locus ID:
 1668

 UniProt ID:
 P59666

 Cytogenetics:
 8p23.1

Domains: Defensin_propep, DEFSN, defensins

Protein Families: Druggable Genome, Secreted Protein

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 3, 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 1 by only one amino acid. This gene and the gene encoding defensin, alpha 1

are both subject to copy number variation. [provided by RefSeq, Oct 2014]