

## Product datasheet for **RG215528**

### DEFB107B (NM\_001040705) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids

**Tag:** TurboGFP

**Symbol:** DEFB107B

**Synonyms:** Hst21816

**Mammalian Cell Selection:** Neomycin

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

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

**ORF Nucleotide Sequence:** >RG215528 representing NM\_001040705  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGCCTGGAGCCATGAAAATATTTGTCTTTATTTGGCTGCTCTCATTCTTCTTGCTCAAATTTTCCAAG  
CCAGGACAGCAATTCATAGAGCACTAATTAGTAAGAGAATGGAAGGTCCTGTGAAGCCGAATGTCTTAC  
CTTTGAAGTAAAGATTGGGGGCTGTAGAGCTGAATTAGCACCATTTGCTGCAAAAACAGAAAGAACAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG215528 representing NM\_001040705  
Red=Cloning site Green=Tags(s)

MPGAMKIFVFILAALILLAQIFQARTAIHRALISKRMEGHCEAECLTFEVKIGGCRAELAPFCCKNRKKH

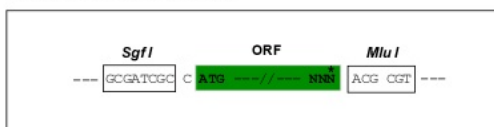
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI



### Cloning Scheme:

Cloning sites used for ORF Shuttling:



EcoR I
BamH I Kpn I
RBS
Kozac Consensus
Sgf I
Asc I

CTATAGGGCGGCCGGGAATTCTGCTGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCATCGCCGGCGCCGACAGATCT

Hind III
Nhe I Rsr II
Mlu I
Not I
Xho I
GFP Tag

CAAGCTTAAC TAGCTAGCGGACCG    ACG CGT    ACG CGG CGG CTC GAG    ATG GAG ACG GAC    --- --- ---  
   T    R    T    R    P    L    E    M    E    S    D    -    -    -

Pme I
Fse I

--- --- GAA GAA AGA GTT TAA ACGGCCGGCCGCGGAGCT  
 - - - E E R V Stop

ACCN: NM 001040705

**ORF Size:** 210 bp

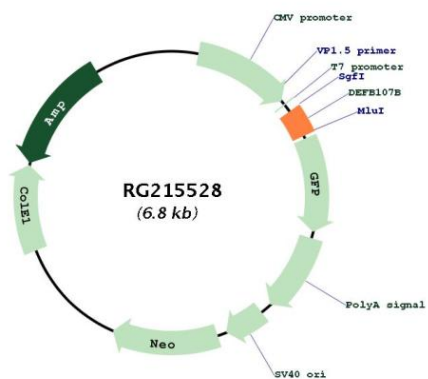
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<u>NM_001040705.2</u>
<b>RefSeq Size:</b>	389 bp
<b>RefSeq ORF:</b>	213 bp
<b>Locus ID:</b>	503614
<b>UniProt ID:</b>	<u>Q8IZN7</u>
<b>Cytogenetics:</b>	8p23.1
<b>Protein Families:</b>	Transmembrane
<b>Gene Summary:</b>	<p>Defensins form a family of antimicrobial and cytotoxic peptides made by neutrophils. Defensins are short, processed peptide molecules that are classified by structure into three groups: alpha-defensins, beta-defensins and theta-defensins. All beta-defensin genes are densely clustered in four to five syntenic chromosomal regions. Chromosome 8p23 contains at least two copies of the duplicated beta-defensin cluster. This duplication results in two identical copies of defensin, beta 107, DEFB107A and DEFB107B, in tail-to-tail orientation. This gene, DEFB107B, represents the more telomeric copy. [provided by RefSeq, Oct 2014]</p>

Product images:



Circular map for RG215528