

## Product datasheet for **RC208244**

### beta Defensin 1 (DEFB1) (NM\_005218) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** beta Defensin 1 (DEFB1) (NM\_005218) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** beta Defensin 1  
**Synonyms:** BD1; DEFB-1; DEFB101; HBD1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC208244 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

**ATGAGAACTTCCTACCTTCTGCTGTTTACTCTCTGCTTACTTTTGTCTGAGATGGCCTCAGGTGTAAC**  
**TTCTCACAGGCCTTGCCACAGATCTGATCATTACAATTGCGTCAGCAGTGGAGGCAATGTCTCTATTC**  
**TGCTGCCGATCTTTACAAAATTC AAGGCACCTGTTACAGAGGAAGCCAAGTGCTGCAAG**

**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT**  
**ACAAGGATGACGACGATAAGGTTTAA**

**Protein Sequence:** >RC208244 protein sequence  
Red=Cloning site Green=Tags(s)  
  
MRTSYLLLFTLCLLLSEMASGGNFLTGLGHRSDHYNCVSSGGQCLYSACPIFTKIQGT CYRGKAKCKK  
  
**TRTRPLEQKLI SEEDLAANDILDYKDDDDKV**

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6090\\_b05.zip](https://cdn.origene.com/chromatograms/mk6090_b05.zip)

**Restriction Sites:** SgfI-MluI



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**Cloning Scheme:**


**ACCN:** NM\_005218

**ORF Size:** 204 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\\_005218.4](#)

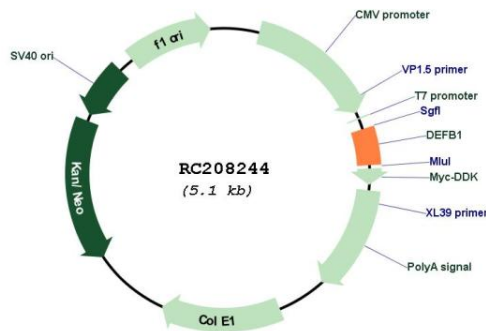
**RefSeq Size:** 484 bp

**RefSeq ORF:** 207 bp

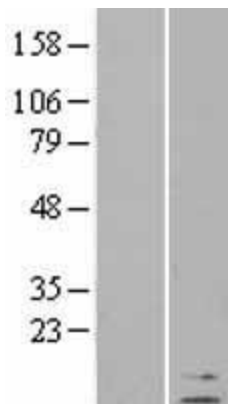
**Locus ID:** 1672  
**UniProt ID:** [P60022](#)  
**Cytogenetics:** 8p23.1  
**Domains:** Defensin\_beta  
**Protein Families:** Secreted Protein  
**MW:** 7.4 kDa

**Gene Summary:** Defensins form a family of microbicidal and cytotoxic peptides made by neutrophils. Members of the defensin family are highly similar in protein sequence. This gene encodes defensin, beta 1, an antimicrobial peptide implicated in the resistance of epithelial surfaces to microbial colonization. This gene maps in close proximity to defensin family member, defensin, alpha 1 and has been implicated in the pathogenesis of cystic fibrosis. [provided by RefSeq, Jul 2008]

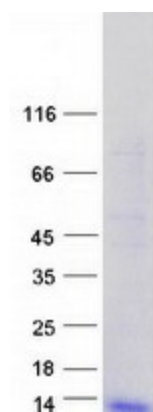
### Product images:



Circular map for RC208244



Western blot validation of overexpression lysate (Cat# [LY401597]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208244 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DEFB1 protein (Cat# [TP308244]). The protein was produced from HEK293T cells transfected with DEFB1 cDNA clone (Cat# RC208244) using MegaTran 2.0 (Cat# [TT210002]).