

## Product datasheet for **RC224160**

### DEFB104B (NM\_001040702) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** DEFB104B (NM\_001040702) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** DEFB104B  
**Synonyms:** BD-4; DEFB-4; hBD-4  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC224160 representing NM\_001040702  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCAGAGACTTGTGCTGCTATTAGCCATTTCTTCTACTCTATCAAGATCTTCCAGTGAGAAGCGAAT  
TTGAATTGGACAGAATATGTGGTTATGGGACTGCCCGTTGCCGGAAGAAATGTCGCAGCCAAGAATACAG  
AATTGGAAGATGTCCCAACCTATGCATGCTGTTTGAGAAAATGGGATGAGAGCTTACTGAATCGTACA  
AAACCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC224160 representing NM\_001040702  
Red=Cloning site Green=Tags(s)

MQRLVLLLAISLLLYQDLPVRSEFELDRICGYGTARCRKKCRSQEYRIGRCPNTYACCLRKRWDESLLNRT  
KP

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8101\\_c08.zip](https://cdn.origene.com/chromatograms/mk8101_c08.zip)

**Restriction Sites:** Sgfl-MluI



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**Cloning Scheme:**


**ACCN:** NM\_001040702

**ORF Size:** 216 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\\_001040702.1](#), [NP\\_001035792.1](#)

**RefSeq Size:** 281 bp

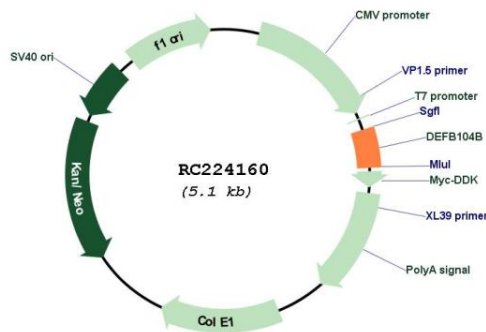
**RefSeq ORF:** 219 bp

**Locus ID:** 503618

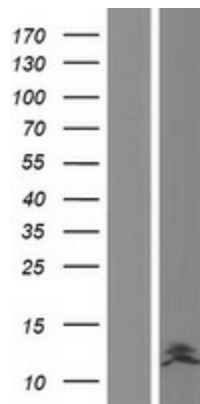
UniProt ID: [Q8WTQ1](#)  
 Cytogenetics: 8p23.1  
 MW: 8.5 kDa

**Gene Summary:** 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 104, DEFB104A and DEFB104B, in head-to-head orientation. This gene, DEFB104B, represents the more telomeric copy. [provided by RefSeq, Oct 2014]

**Product images:**



Circular map for RC224160



Western blot validation of overexpression lysate (Cat# [LY420746]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224160 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).