

## **Product datasheet for RC209352**

# OriGene Technologies, Inc.

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## Dermcidin (DCD) (NM\_053283) Human Tagged ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Dermcidin (DCD) (NM\_053283) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: Dermcidin

Synonyms: AIDD; DCD-1; DSEP; HCAP; PIF

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC209352 ORF sequence

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGAGGTTCATGACTCTCCTCTTCCTGACAGCTCTGGCAGGAGCCCTGGTCTGTGCCTATGATCCAGAGG CCGCCTCTGCCCCAGGATCGGGGAACCCTTGCCATGAAGCATCAGCAGCTCAAAAGGAAAATGCAGGTGA AGACCCAGGGTTAGCCAGACAGGCACCAAAGCCAAGGAAGCAGAGATCCAGCCTTCTGGAAAAAAGGCCTA GACGGAGCAAAAAAAAGCTGTGGGGGGACTCGGAAAACTAGGAAAAGATCCAGTCGAAGATCTAGAAAGCG

TGGGTAAAGGAGCCGTCCATGACGTTAAAGACGTCCTTGACTCAGTACTA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC209352 protein sequence

Red=Cloning site Green=Tags(s)

MRFMTLLFLTALAGALVCAYDPEAASAPGSGNPCHEASAAQKENAGEDPGLARQAPKPRKQRSSLLEKGL

DGAKKAVGGLGKLGKDAVEDLESVGKGAVHDVKDVLDSVL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: <a href="https://cdn.origene.com/chromatograms/mk6035">https://cdn.origene.com/chromatograms/mk6035</a> e12.zip

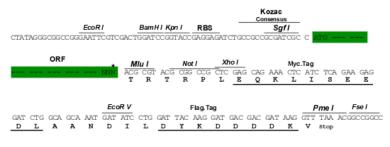
**Restriction Sites:** Sgfl-Mlul





#### **Cloning Scheme:**





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_053283

ORF Size: 330 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.

**RefSeg:** NM 053283.4

RefSeq Size: 645 bp RefSeq ORF: 333 bp



 Locus ID:
 117159

 UniProt ID:
 P81605

 Cytogenetics:
 12q13.2

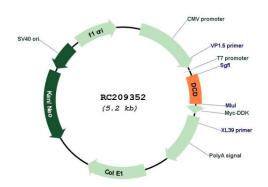
**Protein Families:** Secreted Protein

**MW:** 11.3 kDa

**Gene Summary:** This antimicrobial gene encodes a secreted protein that is subsequently processed into

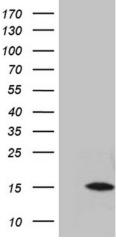
mature peptides of distinct biological activities. The C-terminal peptide is constitutively expressed in sweat and has antibacterial and antifungal activities. The N-terminal peptide, also known as diffusible survival evasion peptide, promotes neural cell survival under conditions of severe oxidative stress. A glycosylated form of the N-terminal peptide may be associated with cachexia (muscle wasting) in cancer patients. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Oct 2014]

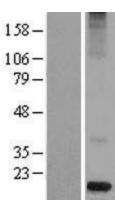
## **Product images:**

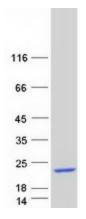


Circular map for RC209352









HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY DCD (Cat# RC209352, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-DCD (Cat# [TA811720])(1:500). Positive lysates [LY403291] (100ug) and [LC403291] (20ug) can be purchased separately from OriGene.

Western blot validation of overexpression lysate (Cat# [LY403291]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209352 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified DCD protein (Cat# [TP309352]). The protein was produced from HEK293T cells transfected with DCD cDNA clone (Cat# RC209352) using MegaTran 2.0 (Cat# [TT210002]).