

## Product datasheet for **RC214491**

### Desmocollin 1 (DSC1) (NM\_024421) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Desmocollin 1 (DSC1) (NM_024421) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Desmocollin 1
Synonyms:	CDHF1; DG2/DG3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC214491 representing NM\_024421  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCTCTGGCCTCTGCTGCCCCAGGGAGCATCTTCTGTAAGCAGCTCCTTTTCTCTCCTGGTTTTAA  
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 AGGCAAAGTGAATCTGGAGGAGTGTCTCAAGTCGGCCAGCCTAATCCGGTCCAGTGACCTCGCCTCAGA  
 ATTCTAGAAGATGGCTCAATTTACACAACACATGACCTCATTGTCTTCTGAAAGGAAAAGTTTTTCCA  
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**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC214491 representing NM\_024421  
 Red=Cloning site Green=Tags(s)

MALASAAPGSIFCKQLLFSLVL TLLCDACQKVYLRVPSHLQAETLVGKVNLEECLKSASLIRSSDPAFR  
 ILEDGSIYTHDLILSSERKSFSIFLSDGQRREQEIKVVL SARENKSPKKRHTKDTALKRKRWAPIP  
 ASLMENSLGPPFQHVQIQSDAAQNYTIFYSISGPGVDKEPFNLFYIEKDTGDIFCTRSIDREKYEQFAL  
 YGYATTADGYAPEYPLPLIIKIEDDNDNAPYFEHRVTFITVPENCRSGTSVGKVTATDLDEPDTLHTRLK  
 YKILQQIPDHPKHFSIHPDTGVITTTTTPFLDREKCDTYQLIMEVRDMGGQPFGFLNTGTITISLEDENDN  
 PPSFTETSYVTEVEENRIDEILRMKVQDQDL PNTPHSKAVYKILQGNENGNFIISTDPNTNEGVL CVVK  
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 GGQIKTQQSFEMVKG GYTLDSNKG GGHQTL E SVKGVGQGD TGRYAYTDWQSFTQ PRLGEKVYLCGQDEEH  
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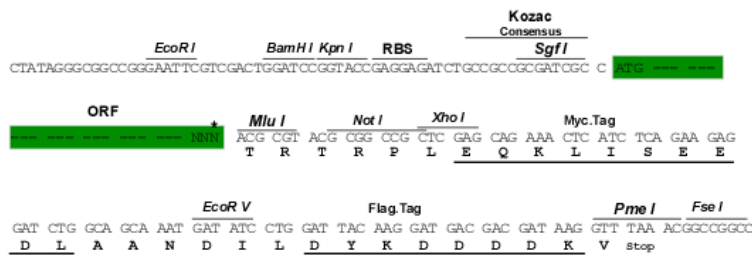
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8010\\_h09.zip](https://cdn.origene.com/chromatograms/mk8010_h09.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:

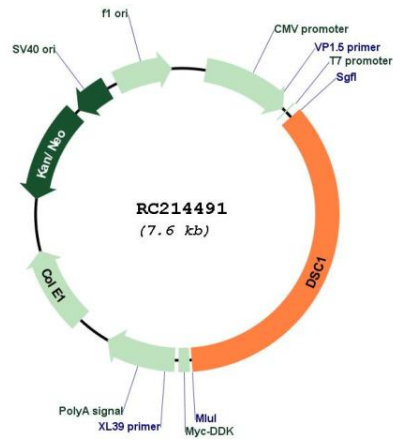


\* The last codon before the Stop codon of the ORF

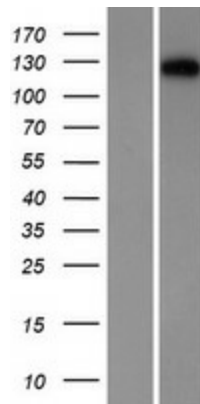
**ACCN:** NM\_024421

<b>ORF Size:</b>	2682 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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>RefSeq:</b>	<a href="#">NM_024421.2</a> , <a href="#">NP_077739.1</a>
<b>RefSeq Size:</b>	4225 bp
<b>RefSeq ORF:</b>	2685 bp
<b>Locus ID:</b>	1823
<b>UniProt ID:</b>	<a href="#">Q08554</a>
<b>Cytogenetics:</b>	18q12.1
<b>Protein Families:</b>	Transmembrane
<b>MW:</b>	96.9 kDa
<b>Gene Summary:</b>	The protein encoded by this gene is a calcium-dependent glycoprotein that is a member of the desmocollin subfamily of the cadherin superfamily. These desmosomal family members, along with the desmogleins, are found primarily in epithelial cells where they constitute the adhesive proteins of the desmosome cell-cell junction and are required for cell adhesion and desmosome formation. A subtype of IgA pemphigus, a life-threatening autoimmune disease, is characterized by the presence of autoantibodies that target the encoded protein. The desmosomal family members are arranged in two clusters on chromosome 18. Alternative splicing of this gene results in multiple transcript variants. At least one of these variants encodes a preproprotein that is proteolytically processed to generate the mature protein. [provided by RefSeq, Nov 2015]

Product images:



Circular map for RC214491



Western blot validation of overexpression lysate (Cat# [LY411285]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214491 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).