

## Product datasheet for RC228879

### CANT1 (NM\_001159773) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CANT1 (NM_001159773) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CANT1
Synonyms:	DBQD; DBQD1; EDM7; SCAN-1; SCAN1; SHAPY
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC228879 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCCGTGCAGCTGTCTGAGCACCCGGAATGGAATGAGTCTATGCACTCCCTCCGGATCAGTGTGGGG  
GCCTTCTGTGCTGGCGTCCATGACCAAGGCCGCGGACCCCGCTTCCGCCCCCGCTGGAAGGTGATCCT  
GACGTTCTTTGTGGGTGCTGCCATCCTCTGGTCTGCTGCCACCGCCCGGCCCGCCAGGCCCGCC  
ACCCACAATGCACAACTGGAGGCTCGGCCAGGCGCCGCAACTGGTACAATGACACCTACCCCTGT  
CTCCCCACAAAGGACACCGGCTGGGATTCGGTATCGAATCGCAGTTATCGCAGACCTGGACACAGAGTC  
AAGGGCCCAAGAGGAAAACACCTGGTTCAGTTACCTGAAAAGGGCTACCTGACCCTGTCAGACAGTGGG  
GACAAGGTGGCCGTGGAATGGGACAAAGACCATGGGGTCTGGAGTCCCACCTGGCGGAGAAGGGGAGAG  
GCATGGAGCTATCCGACCTGATTGTTTTCAATGGGAACTCTACTCCGTGGATGACCGGACGGGGTTCGT  
CTACCAGATCGAAGGCAGCAAAGCCGTGCCCTGGGTGATTCTGTCCGACGGCGACGGCACCGTGGAGAAA  
GGCTTCAAGGCCGAATGGCTGGCAGTGAAGGACGAGCGTCTGTACGTGGGCGGCTGGGCAAGGAGTGG  
CGACCACTACGGGTGATGTGGTGAACGAGAACCAGGAGTGGGTGAAGGTGGTGGCTACAAGGCAGCGT  
GGACCACGAGAAGTGGGTGTCCTCAACTACAACGCCCTGCGGGCTGCTGCCGGCATCCAGCCGCCAGGCTAC  
CTCATCCATGAGTCTGCCTGCTGGAGTGACACGCTGCAGCGCTGGTTCTTCTGCCGCGCCGCGCCAGC  
AGGAGCGCTACAGCGAGAAGGACGACGAGCGCAAGGGCGCCAACCTGCTGCTGAGCGCTCCCTGACTT  
CGGCGACATCGTGTGAGCCACGTCGGGGCGGTGGTCCCCACTCACGGTCTCTGTCCTTCAAGTTCATC  
CCCAACACCGACGACCAGATCATTGTGGCCCTCAAATCCGAGGAGGACAGCGGCAGAGTCGCTCTACA  
TCATGGCCTTACGCTGGACGGCGCTTCTGTTGCCGGAGACCAAGATCGGAAGCGTGAATACGAAGG  
CATCGAGTTCATT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



**Protein Sequence:** >RC228879 protein sequence  
Red=Cloning site Green=Tags(s)

MPVQLSEHPEWNESMHLRISVGGLPVLASMTKAADPRFRPRWKVILTFVGAAILWLLCSHRPAPGRPP  
 THNAHNWRLGQAPANWYNDTYPLSPPQRTAGIRYRIAVIADLDTESRAQEENTWFSYLKKGYLTLSDSG  
 DKVAVEWDKDHGVLESHLAEKGRGMELSDLIVFNGKLYSVDRTGVVYQIEGSKAVPWVILSDGDGTVEK  
 GKFAEWLAVKDERLYVGGLGKEWTTTTGDVVNENPEWVKVVGKGSVDHENWVSNYNALRAAAGIQPPGY  
 LIHESACWSDTLQRWFFLPRRASQERYSEKDDERKGANLLL SASPDFGDI AVSHVAVVPTHGFSSEFKFI  
 PNTDDQIIIVALKSEEDSGRVASYIMAFITLDGRFLLPETKIGSVKYEIEFI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6308\\_f03.zip](https://cdn.origene.com/chromatograms/mk6308_f03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



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

**ACCN:** NM\_001159773

**ORF Size:** 1203 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\\_001159773.2](#)

**RefSeq Size:** 3350 bp

**RefSeq ORF:** 1206 bp

**Locus ID:** 124583

**UniProt ID:** [Q8WVQ1](#)

**Cytogenetics:** 17q25.3

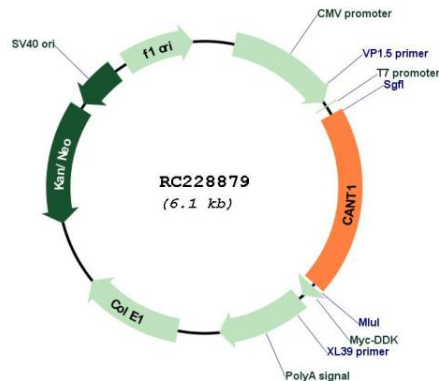
**Protein Families:** Secreted Protein

**Protein Pathways:** Purine metabolism, Pyrimidine metabolism

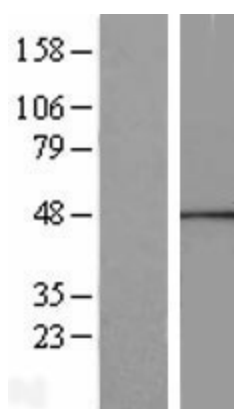
**MW:** 44.8 kDa

**Gene Summary:** This protein encoded by this gene belongs to the apyrase family. It functions as a calcium-dependent nucleotidase with a preference for UDP. Mutations in this gene are associated with Desbuquois dysplasia with hand anomalies. Alternatively spliced transcript variants have been noted for this gene.[provided by RefSeq, Mar 2010]

## Product images:



Circular map for RC228879



Western blot validation of overexpression lysate (Cat# [LY431907]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228879 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).