

Product datasheet for **RC211165**

Protocadherin beta 3 (PCDHB3) (NM_018937) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Protocadherin beta 3 (PCDHB3) (NM_018937) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Protocadherin beta 3
Synonyms:	PCDH-BETA3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC211165 ORF sequence

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

 TTTTGAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

 ATGGAGGCGGGAGGAGAGCGATTCTTAGACAAAGGCAAGTCTTGCTTCTTTGTTTTCTGGGAGGGT
CTCTGGCTGGGTCCGAGTCAAGACGCTATTCTGTGGCTGAGGAAAAAGAGAGGGGCTTTTAAATAGCCAA
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AATTCAGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
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Protein Sequence: >RC211165 protein sequence
 Red=Cloning site Green=Tags(s)

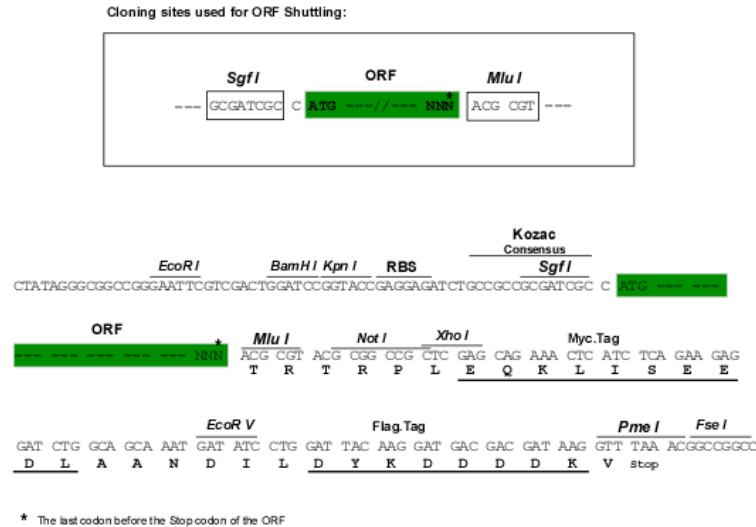
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 KILESTLPGTVIPLGNAEDLDVGRNSLQNYTITPNSHFHVLTRSRDGRKYPELVLDKALDREEQPESL
 TLTALDGGSPPRSGTAQINIQVLDINDNAPEFAQPLYEVAVENTPVNSVIVTVSASDLDTGSFGTISYA
 FFHASEEIRKTFQLNPITGDMQLVKYLNFEAINSYEVDIEAKDGGGLSGKSTVIVQVVDVNDNPPELTLS
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 ITITDLGTPRLKTKYNITVLVSDVNDNAPFTQTSYTLFVRENNSPALHIGSVSATDRDSGTNAQVTYSL
 LPPQDPHLPLSSLVSINADNGHLFALRSLDYEALQAFEFVGAADRGSPAL SSEALVRVLVLDANDNSPF
 VLYPLQNGSAPCTELVPRAAEPGYLVTKVVAVDSDSGQNAWLSYQLLKATEPGLFGVWAHNGEVRTARLL
 SERDAAKHRLVVLVKDNGEPPRSATATLHVLLVDGFSQPYLPLPEAAPAQADLLTVYLVVALASVSSL
 FLFSVLLFVAVRLCRRSRAASVGRCSVPEGPFGQMVDVSGTGTLSSQSYQYEVCLTGGSGTNEFKFLKPI
 IPNFVAQGAERVSEANPSFRKSFEFS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6692_f12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN:	NM_018937
ORF Size:	2388 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.

RefSeq: [NM_018937.5](#)

RefSeq Size: 3577 bp

RefSeq ORF: 2391 bp

Locus ID: 56132

UniProt ID: [Q9Y5E6](#)

Cytogenetics: 5q31.3

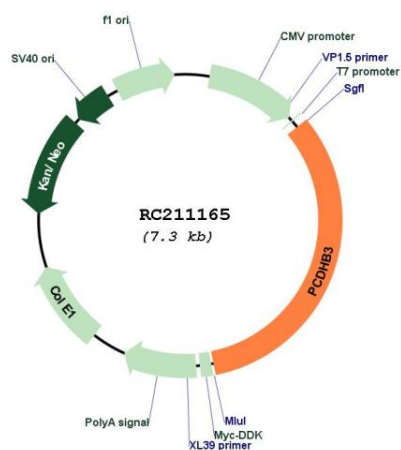
Domains: CA

Protein Families: Transmembrane

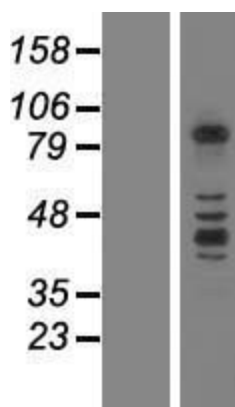
MW: 86.8 kDa

Gene Summary: This gene is a member of the protocadherin beta gene cluster, one of three related gene clusters tandemly linked on chromosome five. The gene clusters demonstrate an unusual genomic organization similar to that of B-cell and T-cell receptor gene clusters. The beta cluster contains 16 genes and 3 pseudogenes, each encoding 6 extracellular cadherin domains and a cytoplasmic tail that deviates from others in the cadherin superfamily. The extracellular domains interact in a homophilic manner to specify differential cell-cell connections. Unlike the alpha and gamma clusters, the transcripts from these genes are made up of only one large exon, not sharing common 3' exons as expected. These neural cadherin-like cell adhesion proteins are integral plasma membrane proteins. Their specific functions are unknown but they most likely play a critical role in the establishment and function of specific cell-cell neural connections. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC211165



Western blot validation of overexpression lysate (Cat# [LY412949]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211165 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).