

## Product datasheet for RC218506

### DCC (NM\_005215) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DCC (NM_005215) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DCC
Synonyms:	CRC18; CRCR1; HGPPS2; IGDCC1; MRMV1; NTN1R1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218506 representing NM_005215 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGAATAGTCTTAGATGTGTTGGGTACCAAGCTGGCTTTTGTACTCTTCGGAGCTTCCTTGCTCA  
GCGCGCATCTTCAAGTAACCGTTTTCAAATTAAGCTTTCACAGCACTGCGTTCCTCTCAGAACCTTC  
TGATGCCGTCACAATGCGGGGAGGAAATGTCCTCCTCGACTGCTCCGCGGAGTCCGACCGAGGAGTTCCA  
GTGATCAAGTGAAGAAAGATGGCATTCTGGCCTTGGGAATGGATGAAAGGAAGCAGCAACTTTCAA  
ATGGGTCTCTGTGATACAAAACATACTTCATTCCAGACACCACAAGCCAGATGAGGGACTTTACCAATG  
TGAGGCATCTTTAGGAGATTCTGGCTCAATTATTAGTCGGACAGCAAAAGTTGCAGTAGCAGGACCACTG  
AGGTTCTTTTACAGACAGAATCTGTACAGCCTTCATGGGAGACACAGTGTACTCAAGTGTGAAGTCA  
TTGGGGAGCCCATGCCAACAATCCACTGGCAGAAGAACCAACAAGACCTGACTCCAATCCCAGGTGACTC  
CCGAGTGGTGGTCTTGCCCTCTGGAGCATTGCAGATCAGCCGACTCCAACCGGGGACATTGGAATTTAC  
CGATGCTCAGCTCGAAATCCAGCCAGCTCAAGAACAGGAAATGAAGCAGAAGTCAAGATTTTATCAGATC  
CAGGACTGCATAGACAGCTGTATTTCTGCAAAGACCAATCCAATGTAGTACCCATGAAGGAAAAGATGC  
TGTCCTGGAATGTTGTGTTTCTGGCTATCCTCCACCAAGTTTACCTGGTTACGAGGCGAGGAAGTCATC  
CAACTCAGGTCTAAAAAGTATTCTTTATTGGGTGGAAGCAACTTGCTTATCTCCAATGTGACAGATGATG  
ACAGTGGAAATGTATACCTGTGTTGTACATATAAAAAATGAGAATATTAGTGCCTCTGCAGAGCTCACAGT  
CTTGTTCCGCCATGGTTTTTAAATCATCCTTCCAACCTGTATGCCTATGAAAGCATGGATATTGAGTTT  
GAATGTACAGTCTCTGAAAGCCTGTGCCACTGTGAATTGGATGAAGAATGGAGATGTGGTCATTCCCTA  
GTGATTATTTTTCAGATAGTGGGAGGAAGCAACTTACGGATACTTGGGGTGGTGAAGTCAAGTGAAGGCTT  
TTATCAATGTGTGGCTGAAAATGAGGCTGGAAATGCCAGACCAGTGCACAGCTCATTGTCCCTAAGCCT  
GCTATCCCAAGCTCCAGTGTCTCCCTTCGGCTCCAGAGATGTGGTCCCTGTCTTGGTTCCAGCCGAT  
TTGTCCGTCTCAGCTGGCGCCACCTGCAGAAGCGAAAGGAACATTCAAACCTTTCACGGTCTTTTTCTC  
CAGAGAAGGTGACAACAGGGAACGAGCATTGAATACAACACAGCCTGGGTCCTTCAGCTACTGTGGGA



[View online »](#)

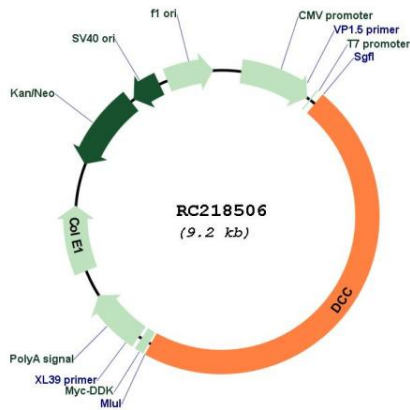
AACCTGAAGCCAGAAGCCATGTACACCTTTCGAGTTGTGGCTTACAATGAATGGGGACCGGGAGAGAGTT  
 CTCAACCCATCAAGGTGGCCACACAGCCTGAGTTGCAAGTTCAGGGCCAGTAGAAAACTGCAAGCTGT  
 ATCTACCTCACCTACCTCAATTCTTATTACCTGGGAACCCCTGCCTATGCAAACGGTCCAGTCCAAGGT  
 TACAGATTGTTCTGCACTGAGGTGTCCACAGGAAAAGAACAAGATATAGAGGTTGATGGACTATCTTATA  
 AACTGGAAGGCCGTAAAAAATTCACCGAATATAGTCTTCGATTCTTAGCTTATAATCGCTATGGTCCGGG  
 CGTCTCTACTGATGATATAACAGTGGTTACACTTCTGACGTGCCAAGTGCCCGCCTCAGAACGTCTCC  
 CTGGAAGTGGTCAATCAAGAAGTATCAAAGTTAGCTGGCTGCCCTCCATCAGGAACACAAAAATGGAT  
 TTATTACCGGCTATAAAATTCGACACAGAAAGACGCCCGAGGGGTGAGATGGAAACACTGGAGCCAAA  
 CAACCTCTGGTACCTATTCACAGACTGGAGAAAGGAAGTCAGTACAGTTTCCAGGTGTCAGCCATGACA  
 GTCAATGGTACTGGACCACCTTCCAAGTGGTATACTGCAGAGACTCCAGAGAATGATCTAGATGAATCTC  
 AAGTTCCTGATCAACCAAGCTCTTTCATGTGAGGCCCCAGACTAACTGCATCATCATGAGTTGGACTCC  
 TCCCTTGAACCCAAACATCGTGGTGGGAGGTTATATTATCGGTTATGGCGTTGGGAGCCCTTACGCTGAG  
 ACAGTGCCTGTGGACAGCAAGCAGCGATATTATCCATTGAGAGGTTAGAGTCAAGTCCCATTATGTA  
 TCTCCCTAAAAGCTTTTAAACATGCCGGAGAAGGAGTTCCCTTTATGAAAGTCCACCACCAGGTCTAT  
 AACCGATCCCCTGACCCAGTTGATTATTATCCTTTGCTTGATGATTTCCCCACCTCGGTCCCAGATCTC  
 TCCACCCCATGTCCCACAGTAGGTGTACAGGCTGTGGCTCTTACCCATGATGCTGTGAGGGTACAGT  
 GGGCAGACAACCTGTGCCCTAAGAACCAAAGACGTCTGAGGTGCGACTTACACCGTCCCGTGGAGAAC  
 CAGCTTTTCTGCAAGTGCAAAATACAAGTCAGAAGACACAACATCTCTAAGTTACACAGCAACAGGCCTC  
 AAACCAACACAATGTATGAATTCTCGGTATGGTAACAAAAACAGAAGGTCCAGTACTTGGAGCATGA  
 CTGCACATGCCACCACGTATGAAGCAGCCCCACCTCTGCTCCCAAGGACTTGACAGTCACTACTAGGGA  
 AGGGAAGCCTCGTGCCGTATTGTGAGTTGGCAGCCTCCCTTGGAAAGCAATGGGAAAATTAAGTCTTAC  
 ATCTTATTTTATACCTTGGACAAGAACAATCCCAATTGATGACTGGATTATGGAACAACAGTGGTGATA  
 GGCTTACTCATAAATCATGGATCTCAACCTTGATACTATGATTAATCTTCAAGTCAAGCAGCAAAATTC  
 AAAAGGAGTGGGGCCACTCTGATCCTATCCTCTTCAGGACTCTGAAAGTGGAAACACCCTGACAAAATG  
 GCTAATGACCAAGGTCGTATGGAGATGGAGGTTATTGGCCAGTTGATACTAATTTGATTGATAGAAGCA  
 CCTAAATGAGCCGCAATTGGACAATGCACCCCGCATGGCAGTGTCACTCCTCAGAAGAACAGCAA  
 CCTGCTTGTGATCATTGTGGTACCCTGGTGTATCACAGTGTGGTAGTGGTATCGTGGCTGTGATT  
 TGCACCCGACGCTCTTACAGCCAGCAGAGAAAAGAAACGGGCCACCCACAGTGTGGCAAAAGGAAGGCA  
 GCCAGAAGGACCTCCGACCCCTGATCTTTGGATCCATCATGAAGAAATGGAGATGAAAAATATTGAAA  
 GCCATCTGGCACTGACCCTGCAGGAAGGACTCTCCCATCAAAGTTGCCAAGACCTCACACCAGTCAGC  
 CACAGCCAGTCAGAAACCAACTGGGAAGCAAAAGCACCTCTCATTGAGTCAAGACACTGAGGAAGCAG  
 GGAGCTCTATGTCCACTCTGGAGAGTCTGCTGGCTGCACGCCAGCCCCCGGGCCAAGCTCATGATTC  
 CATGGATGCCAGTCCAACAATCCTGCTGTGCTGAGCGCCATCCCGGTGCCAACGCTAGAAAAGTGCCAG  
 TACCCAGGAATCCTCCCGTCTCCACCTGTGGATATCCCAACCCGAGTTCACTCTCCGGCTGTGCCAT  
 TCCCAACTCTCAGTGGACCGAGGTTTCGGAGCAGGAAGAAGTCAGTCAAGTGAAGGACCAACTAC  
 CCAACAACCACCTATGCTGCCCCATCTCAGCCTGAGCATTCTAGCAGCGAGGAGGACCAAGCAGAACC  
 ATCCCCACAGCTTGTGTTGACCAACTCACCCACTCCGACGCTTTGCTAATCCTTTGCTACCTCCACCAA  
 TGAGTGAATAGAACCAGAAAGTCCCTTACACACCACTTTTGTCTCAGCCAGGGCCACTCTTCTAAGAC  
 CCATGTGAAAACAGCCTCCCTTGGTTGGCTGGAAAAGCAAGATCCCCTTGGCTTCTGTGCTGTGTTGCA  
 ACAGCCCCCTGAAGTGTCTGAGGAGAGCCAAAACCAACAGAGGATTGAGCAATGTGTATGAACAGGATG  
 ATCTGAGTGAACAAATGGCAAGTTTGAAGGACTCATGAAGCAGCTTAATGCCATCACAGGCTCAGCCTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

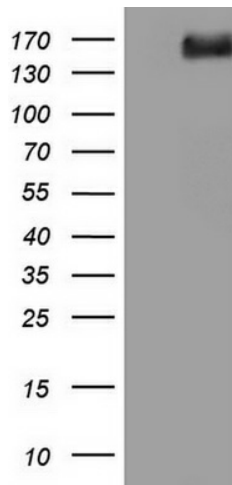


<b>OTI Disclaimer:</b>	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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_005215.4</a>
<b>RefSeq Size:</b>	4608 bp
<b>RefSeq ORF:</b>	4344 bp
<b>Locus ID:</b>	1630
<b>UniProt ID:</b>	<a href="#">P43146</a>
<b>Cytogenetics:</b>	18q21.2
<b>Domains:</b>	ig, IGc2, IG, FN3
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Axon guidance, Colorectal cancer, Pathways in cancer
<b>MW:</b>	158.3 kDa
<b>Gene Summary:</b>	This gene encodes a netrin 1 receptor. The transmembrane protein is a member of the immunoglobulin superfamily of cell adhesion molecules, and mediates axon guidance of neuronal growth cones towards sources of netrin 1 ligand. The cytoplasmic tail interacts with the tyrosine kinases Src and focal adhesion kinase (FAK, also known as PTK2) to mediate axon attraction. The protein partially localizes to lipid rafts, and induces apoptosis in the absence of ligand. The protein functions as a tumor suppressor, and is frequently mutated or downregulated in colorectal cancer and esophageal carcinoma. [provided by RefSeq, Oct 2009]

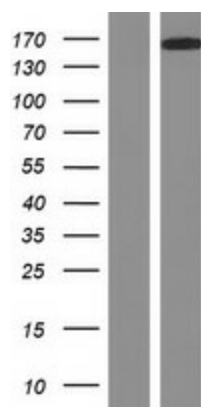
Product images:



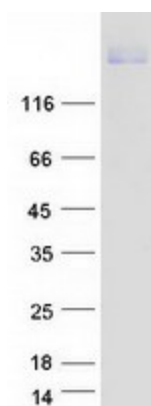
Circular map for RC218506



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY DCC (Cat# RC218506, 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-DCC (Cat# [TA804515]). Positive lysates [LY417439] (100ug) and [LC417439] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY417439]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218506 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DCC protein (Cat# [TP318506]). The protein was produced from HEK293T cells transfected with DCC cDNA clone (Cat# RC218506) using MegaTran 2.0 (Cat# [TT210002]).