

Product datasheet for **MR227393**

Unc5c (NM_009472) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Unc5c (NM_009472) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Unc5c
Synonyms:	B130051O18Rik; rcm; Unc5h3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>MR227393 representing NM_009472
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAGGAAAGGTCTGAGGGCGACAGCGCCCGCTGCGGACTGGGACTAGGATACTTGCTGCAGATGCTTG
 TGTACCTGCCCTGGCCCTGCTAAGCGCCAGTGGCACCGGCTCCGCCGCTCAAGATGATGAATTTTTCA
 CGAACTCCAGAAACCTTTCCATCTGACCCACCTGAGCCATTGCCACACTTCTCATTGAGCCCGAGGAA
 GCTTACATTGTGAAGAACAAGCCTGTGAACCTGTATTGTAAGCCAGCCCTGCCACCCAGATCTACTTCA
 AGTGCAACAGCGAGTGGGTTTCATCAGAAGGACCACGTAGTAGACGAGAGAGTAGATGAAACCTCTGGTCT
 AATTGTGAGAGAAGTGAACATTGAGATTTACGCCAGCAGGTGGAGGAACTGTTTGGGCCTGAAGATTAC
 TGGTGCCAGTGTGTGGCCTGGAGCTCAGCAGGCACTACGAAGAGTCGGAAGGCATACGTGCGCATTGCGT
 ATCTGCGGAAGACATTCGAGCAGGAACCCCTGGGAAAGGAAGTGTCTTGGAGCAGGAAGTCTTACTCCA
 GTGTGCGCCACCTGAAGGGATCCAGTGGCTGAGGTAGAATGGCTAAAGAATGAAGACATAATTGATCCT
 GCTGAAGATCGGAACCTTTATATTAATACTATCGATCACAACTGATCATCAAGCAAGCCCGACTCTCAGATA
 CAGCAAATTATACCTGTGTTGCCAAAAATATTGTTGCCAAGAGAAAAAGCACCACAGCCACTGTCATCGT
 GTATGTTAATGGTGGCTGGTCCACTGGACAGAGTGGTCTGTGTGTAACAGCCGCTGTGGGCGAGGATAT
 CAGAAACGCACAAGAACCTGCACCAACCCAGCCCCACTCAATGGTGGGCGCTTCTGTGAGGGCAGAGTG
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 GACTGTGATGGCCTGGTCTCAATCCAAGAATGCACGTGATGGCTGTGCATGCAGGCTGCTCCTGACT
 CAGATGATGGCTCTCTACGTGGGATTTGTGATCGCTGTAACAGTCTGTCTGGCGATCACTGTTGTGGT
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 GCGCGCTTTCAGCCTGTGAACATCAAGGCTGCCAGACAAGATCTCCTGGCTGTCCCCCTGACCTCACCT
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 CAGGATGACCTTGCCGAGTTCTCATCAAAGTGTACCCAGATGACCCAGTCTTGTAGAGAATGAGG
 CCCTTAACCTGAAGAACCAGAGCCTCGCAAGACAGACTGACCCATCCTGCACAGCATTGGTACCTTCAA
 CTCTCTGGGGTCACTCATCATTCTAATTCAGGAGTAAGCTTGTGATTCCCGCTGGGGCCATTCT
 CAGGGGAGAGTCTATGAAATGTATGTGACTGTACACAGGAAAGAAAATATGAGGCCCCCATGGAAGACT
 CTCAGACCCTACTTACCCTGTGGTGTGAGCTGTGGGCTCCTGGAGCTCTGCTGACCCGCCCTGTATCCT
 CACTCTGCATCACTGTGCAGACCCAGCACCAGGACTGGAAGATCCAGCTCAAAAACAGGCAGTGCAG
 GGCAAATGGGAGGATGTTGTGGTGGTGGGGAGGAGAAGTTCACAACCCCTGTTACATTAGCTGGATG
 CAGAGGCTTGCCATATCCTCACAGAGAACCTCAGTACCTATGCCCTGGTGGGAGTCCACCACCAAAGC
 AGCTGCCAAGCGTCTTAAACTGGCCATCTTTGGGCCCTCTGCTGCTCTTCCCTGGAGTACAGCATTAGA
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 AGCTCCTAGAAGAACCAAGGCTCTTCAATTTAAAGGCAGCATCCACAACCTGCGCCTGTCTATTCATGA
 CATCGCCCATCCCTCTGGAAGAGCAAATGCTGGTAAGTATCAGGAAATCCATTTTACCACATCTGG
 AGTGGCTCTCAAAGAAACCTCCACTGCACCTTCACTCTGGAAGACTCAGCCTAAACACAGTGGAACTGG
 TTTGCAAACCTCTGTGTGCGGCAGGTTGAAGGAGAAGGCGAGATCTTCCAGCTCAACTGACTGTGTGAGA
 GGAACCTACTGGCATCGACTTACCTCTCCTGGACCCTGCTAGTACCATCACCAGTGTACCCGACCAAGT
 GCTTTCAGCATTCTCTCCATATCCGGCAGAAGCTATGCAGCAGCCTGGATGCCCTCAAACAAGAGGCC
 ATGACTGGAGGATGCTGGCCATAAACTCAACCTGGACAGGACTTGAATTACTTTGCCACCAAATCGAG
 CCCAAGTGGCGTAATCCTGGATCTTTGGGAAGCACAGAAGTCCAGATGGAACCTGAGCATGCTGGCA
 GCCGCTCTGGAAGAAATGGGAAGACATGAGACAGTGGTGTCTTGGCAGCAGAAGGACAGTAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGAT AAGGTTTAA

Protein Sequence: >MR227393 representing NM_009472
 Red=Cloning site Green=Tags(s)

MRKGLRATAARCGLGLGYLLQMLVLPALALLSASGTGSAAQDEFFHELPETFPSDPPEPLPHFLIEPEE
 AYIVKNKPVNLYCKASPATQIYFKCNSEVWHQKDHVVDERVDTSGLIVREVSIEISRQQVEELFGPEDY
 WCQCVAWSSAGTTKSRKAYVRIAYLRKTFEQEPLGKEVSLEQEVELLQCRPPEGIPVAEVEWLKNEIDI
 AEDRNFYITIDHNLIIKQARLSDTANYTCVAKNIVAKRKSTTATVIVYVNGGWSTWTEWSVCNSRCGRGY
 QKRTRTCTNPAPLNGGAFCEGQSVQKIACTTLCVPDGRWTSWSKWSTCGTECTHWRRRECTAPAPKNGGK
 DCDGLVLQSKNCTDGLCMQAAPDSDVALYVGIVIAVTVCLAITVVVALFVYRKNHRDFESDIIDSSALN
 GGFQPVNIKAARQDLLAVPPDLTSAAMYRGPVYALHDVSDKIPMTNSPILDPLPNLKIKVYNSSGAVTP
 QDDLAEFSSKLSPQMTQSLENEALNLKNQSLARQTDPSCTAFGTFNLSGGHLIIPNSGVSLIPAGAIP
 QGRVYEMYVTVHRKENMRPPMEDSQTLLTPVVSCGPPGALLTRPVILTLHHCADPSTEDWKIQLKNQAVQ
 GQWEDVVVVGEENFTTPCYIQLDAEACHILTENLSTYALVGQSTTKAAAKRLKLAIFGPLCCSSLEYSIR
 VYCLDDTDALKEVLQLERQMGQLLEPKALHFKGSIHNLRLSIHDIHSLWKSLLAKYQEIPFYHIW
 SGSQRNLHCTFTLERLSLNTVELVCKLCVRQVEGEGQIFQLNCTVSEPTGIDLPLLDPASTITTTVTGPS
 AFSIPLPIRQKLCSSLDAPQTRGHDWRMLAHKLNLDRYLNYFATKSSPTGVILDLWEAQNFDPGNLSMLA
 AVLEEMGRHETVVSAAEGQY

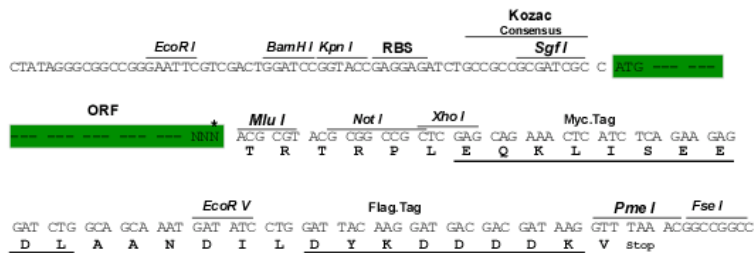
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9012_d05.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_009472

ORF Size: 2793 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_009472.4](#)

RefSeq Size: 9296 bp

RefSeq ORF: 2796 bp

Locus ID: 22253

UniProt ID: [O08747](#)

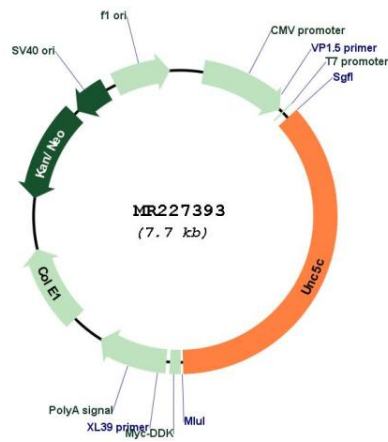
Cytogenetics: 3 65.57 cM

MW: 103.5 kDa

Gene Summary:

Receptor for netrin required for axon guidance (PubMed:22685302, PubMed:10399920). Mediates axon repulsion of neuronal growth cones in the developing nervous system upon ligand binding (PubMed:10399920, PubMed:22685302). NTN1/Netrin-1 binding might cause dissociation of UNC5C from polymerized TUBB3 in microtubules and thereby lead to increased microtubule dynamics and axon repulsion (PubMed:28483977). Axon repulsion in growth cones may also be caused by its association with DCC that may trigger signaling for repulsion (PubMed:10399920). Might also collaborate with DSCAM in NTN1-mediated axon repulsion independently of DCC (PubMed:22685302). Also involved in corticospinal tract axon guidance independently of DCC (PubMed:9126743, PubMed:9389662, PubMed:12451134). Involved in dorsal root ganglion axon projection towards the spinal cord (By similarity). It also acts as a dependence receptor required for apoptosis induction when not associated with netrin ligand (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR227393