

Product datasheet for RC205116

C9orf41 (CARNMT1) (NM_152420) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	C9orf41 (CARNMT1) (NM_152420) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	C9orf41
Synonyms:	C9orf41; UPF0586
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC205116 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCAGCGACGGCGTCGCCCTCCGCCCCACCTCCCGGCTGCCGAGGGCTGCGGGGGAGGAGCGGTG
GCAGCGAGGAGGTGGAAGTGCAGTTTTCCGCCGGCGTTGGGGCTCGGCCGCGCGGTTTCGGCGGCAGC
GGCGGCCGCCACGCGCAGCACCGAGGAGGAGGAGGAGGAGGCTTGAGCGTGAGCACTTCTGGAAGATCATT
AATGCCTCCGCTACTACGGCACCAGTATGCATGAGCGGGTGAACCGAACAGAAAGACAGTTTCGATCAC
TTCCAGCTAACCAACAGAACTACTTCCCTCAGTTTCTTCTCACTTGACAAGATCCGGAATGCATTGA
TCATAATCAAGAAATACTACTGACCATTGTGAATGATTGCATACATATGTTTGAAAATAAAGAAATGGA
GAAGATGGGAATGAAAAGATTATGCCAGCATCTACATTTGACATGGATAAGTTAAAATCCACGCTGAAAC
AGTTTGTGAGAGACTGGAGTGAACTGGGAAAGCAGAAAGGGATGCCTGTTACCAGCCAATCATTAAAGA
AATTTTAAAAATTTTCCAAAAGAGAGATGGGATCCTTCTAAAGTAAATATTCTGGTACCTGGTCTGGA
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TGCTCTTTTCTCCAACCTTGTACTCAACAGATGTTCTGAAATTAATAAATAAACTTTATCCTGGAT
CCATCAGTTTAGCAATAACCGGAGATCAGCTGATCAGATTCGACCCATCTTTTCCCTGATGTTGACCCC
CACAGTCTCCTCCTGGTTCTAACTTTTCTATGACAGCAGGAGATTTTCAAGAGATTTATTCAGAATGCA
ATACCTGGGACTGTATTGCTACCTGTTTCTCATAGACACAGCTCACAATGTAATTGATTATATTGATAC
AATATGAAAAATACTCAAGCCAGGTGGAATTTGGATAAATCTAGGTCCTGCTGTACCCTTTGAAAAAT
CTGGCAATGAACTTTCCATAGAATTGAGCTATGAGGATATAAAAAACGTTGTTCTGCAGTATGGATTCA
AGGTAGAGGTGAAAAAGAATCTGTATTGTCAACATATACTGTGAATGATCTCTATGATGAAATACTA
CTATGAATGTGTCTTGTGTTGTGGTCCGTAAGCCACAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC205116 protein sequence
Red=Cloning site Green=Tags(s)

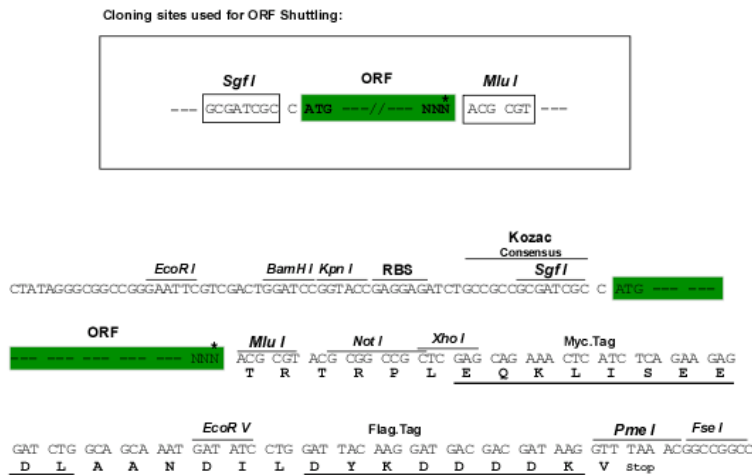
MQRRRRPPPTSRLEPGCGGGGGGSEEEVEVQFSAGRWGSAAAVSAAAAATRSTEEEEERLEREHFWKII
 NAFRYRYGTSMHERVNRTERQFRSLPANQQKLLPQFLLHLDKIRKCIDHNQEILLTIVNDCIHMENKEYG
 EDGNGKIMPASTFMDMKLSTLKQFVRDWSSETGKAERDACYQPIIKEILKNFPERWDPKVNILVPGAG
 LGRLEWEIAMLGYACQGNWSFFMLFSSNFVLRNRCSEINKYKLYPWIHQFSNNRRSADQIRPIFFPDVDP
 HSLPPGSNFSMTAGDFQEIYSECNWDCIATCFFIDTAHNVIDYIDTIWKILKPGGIWINLGPLLYHFEN
 LANELSIELSYEDIKNVVLQYGFKVEVEKESVLSITYVNDLSMMKYYYECVLFVVRKPK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6177_g01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_152420

ORF Size: 1227 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_152420.3](#)

RefSeq Size: 2219 bp

RefSeq ORF: 1230 bp

Locus ID: 138199

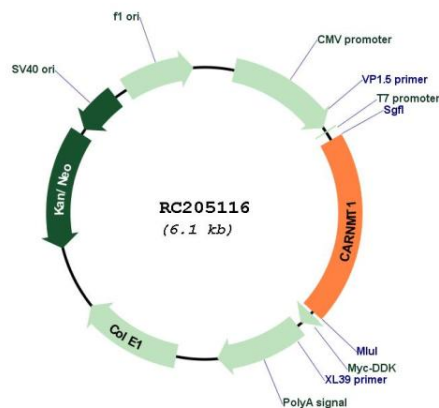
UniProt ID: [Q8N4J0](#)

Cytogenetics: 9q21.13

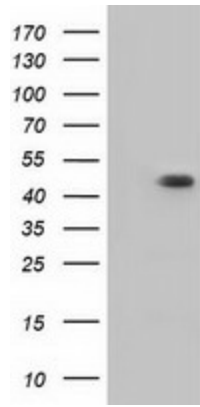
MW: 47.2 kDa

Gene Summary: The protein encoded by this gene is a methyltransferase that converts carnosine to anserine, a dipeptide found abundantly in skeletal muscle. The encoded protein can methylate other dipeptides as well. Three transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Feb 2016]

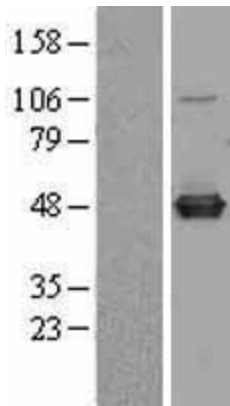
Product images:



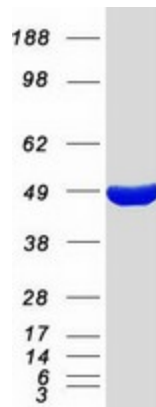
Circular map for RC205116



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY C9orf41 (Cat# RC205116, 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-C9orf41(Cat# [TA501308]). Positive lysates [LY403480] (100ug) and [LC403480] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY403480]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205116 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CARNMT1 protein (Cat# [TP305116]). The protein was produced from HEK293T cells transfected with CARNMT1 cDNA clone (Cat# RC205116) using MegaTran 2.0 (Cat# [TT210002]).