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Product datasheet for RC201241

n-Myc (MYCN) (NM_005378) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	n-Myc (MYCN) (NM_005378) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	n-Myc
Synonyms:	bHLHe37; MODED; N-myc; NMYC; ODED
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC201241 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCGAGCTGCTCCACGTCCACCATGCCGGGCATGATCTGCAAGAACCCAGACCTCGAGTTTGACTCGC
TACAGCCCTGCTTCTACCCGGACGAAGATGACTTCTACTTCGGCGGCCCCGACTCGACCCCCCCGGGGGA
GGACATCTGGAAGAAGTTTGAGCTGCTGCCCACGCCCCCGCTGTCGCCCAGCCGTGGCTTCGCGGAGCAC
AGCTCCGAGCCCCCGAGCTGGGTCACGGAGATGCTGCTTGAGAACGAGCTGTGGGGCAGCCCGGCCGAGG
AGGACGCGTTCGGCCTGGGGGGACTGGGTGGCCTCACCCCCAACCCGGTCATCCTCCAGGACTGCATGTG
GAGCGGCTTCTCCGCCCGCGAGAAGCTGGAGCGCGCCGTGAGCGAGAAGCTGCAGCACGGCCGCGGGCCG
CCAACCGCCGGTTCCACCGCCCAGTCCCCGGGAGCCGGCGCCGCCAGCCCTGCGGGTCGCGGGCACGGCG
GGGCTGCGGGAGCCGGCCGCGCCGGGGCCGCCCTGCCCGCCGAGCTCGCCCACCCGGCCGCCGAGTGCGT
GGATCCCGCCGTGGTCTTCCCCTTTCCCGTGAACAAGCGCGAGCCAGCGCCCGTGCCCGCAGCCCCGGCC
AGTGCCCCGGCGGCGGGCCCTGCGGTCGCCTCGGGGGCGGGTATTGCCGCCCCAGCCGGGGCCCCGGGGG
TCGCCCCTCCGCGCCCAGGCGGCCGCCAGACCAGCGGCGGCGACCACAAGGCCCTCAGTACCTCCGGAGA
GGACACCCTGAGCGATTCAGATGATGAAGATGATGAAGAGGAAGATGAAGAGGAAGAAATCGACGTGGTC
ACTGTGGAGAAGCGGCGTTCCTCCTCCAACACCAAGGCTGTCACCACATTCACCATCACTGTGCGTCCCA
AGAACGCAGCCCTGGGTCCCGGGAGGGCTCAGTCCAGCGAGCTGATCCTCAAACGATGCCTTCCCATCCA
CCAGCAGCACAACTATGCCGCCCCCTCTCCCTACGTGGAGAGTGAGGATGCACCCCCACAGAAGAAGATA
AAGAGCGAGGCGTCCCCACGTCCGCTCAAGAGTGTCATCCCCCCAAAGGCTAAGAGCTTGAGCCCCCGAA
ACTCTGACTCGGAGGACAGTGAGCGTCGCAGAAACCACAACATCCTGGAGCGCCAGCGCCGCAACGACCT
TCGGTCCAGCTTTCTCACGCTCAGGGACCACGTGCCGGAGTTGGTAAAGAATGAGAAGGCCGCCAAGGTG
GTCATTTTGAAAAAGGCCACTGAGTATGTCCACTCCCTCCAGGCCGAGGAGCACCAGCTTTTGCTGGAAA
AGGAAAAATTGCAGGCAAGACAGCAGCAGTTGCTAAAGAAAATTGAACACGCTCGGACTTGC

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC201241 protein sequence
Red=Cloning site Green=Tags(s)

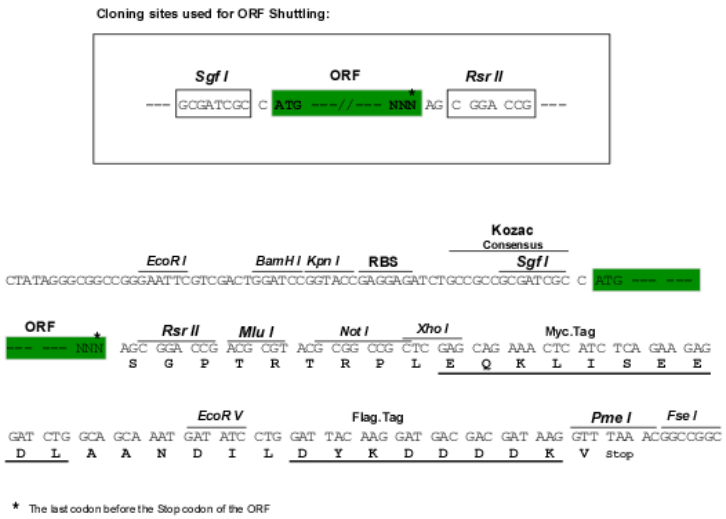
MPSCSTSTMPGMICKNPDLEFDSLQPCFYPDEDDFYFGGPDSTPPGEDIWKKFELLPTPPLSPSRGFAEH
SSEPPSWVTEMLLENELWGSPAEEDAFGLGGLGGLTPNPVILQDCMWSGFSAREKLERAVSEKLQHGRGP
PTAGSTAQSPGAGAASPAGRGHGGAAGAGRAGAALPAELAHPAAECVDPAVVFPFPVNKREPAPVPAAPA
SAPAAGPAVASGAGIAAPAGAPGVAPPRPGGRQTSGGDHKALSTSGEDTLSDSDDEDDEEEDEEEEIDVV
TVEKRRSSSNTKAVTTFTITVRPKNAALGPGRAQSSELILKRCLPIHQQHNYAAPSPYVESEDAPPQKKI
KSEASPRPLKSVIPPKAKSLSPRNSDSEDSERRRNHNILERQRRNDLRSSFLTLRDHVPELVKNEKAAKV
VILKKATEYVHSLQAEEHQLLLEKEKLQARQQQLLKKIEHARTC

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6222_b08.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_005378

ORF Size: 1392 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_005378.6

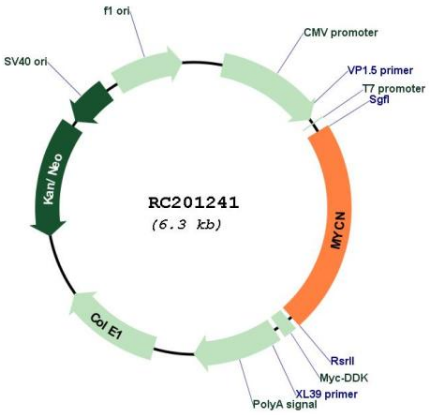
RefSeq Size: 2736 bp

RefSeq ORF: 1395 bp

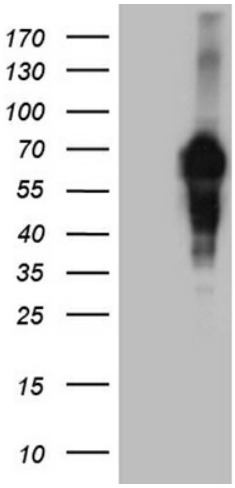
Locus ID: 4613

UniProt ID:	P04198
Cytogenetics:	2p24.3
Domains:	HLH, Myc_N_term
Protein Families:	Druggable Genome, Transcription Factors
MW:	49.6 kDa
Gene Summary:	This gene is a member of the MYC family and encodes a protein with a basic helix-loop-helix (bHLH) domain. This protein is located in the nucleus and must dimerize with another bHLH protein in order to bind DNA. Amplification of this gene is associated with a variety of tumors, most notably neuroblastomas. Multiple alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2014]

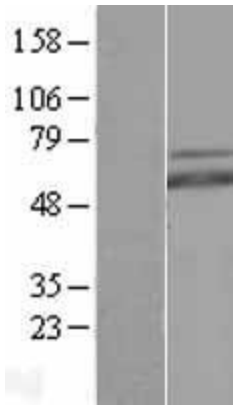
Product images:



Circular map for RC201241



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MYCN (Cat# RC201241, 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-MYCN (Cat# [TA809345])(1:2000). Positive lysates [LY417334] (100ug) and [LC417334] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY417334]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201241 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).