

## Product datasheet for **RC402789**

### n-Myc (MYCN) (NM\_005378) Human Mutant ORF Clone

#### Product data:

Product Type:	Mutant ORF Clones
Product Name:	n-Myc (MYCN) (NM_005378) Human Mutant ORF Clone
Mutation Description:	P409L
Affected Codon#:	409
Affected NT#:	1226
Nucleotide Mutation:	MYCN Mutant (P409L), Myc-DDK-tagged ORF clone of Homo sapiens v-myc myelocytomatosis viral related oncogene, neuroblastoma derived (avian) (MYCN) as transfection-ready DNA
Effect:	Feingold syndrome
Symbol:	MYCN
Synonyms:	bHLHe37; MODED; N-myc; NMYC; ODED
E. coli Selection:	Kanamycin (25 ug/mL)
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
Tag:	Myc-DDK
ACCN:	NM_005378
ORF Size:	1392 bp
Restriction Sites:	Sgfl-RsrII



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**ORF Nucleotide Sequence:**

>RC402789 representing NM\_005378  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGCCGAGCTGCTCCACGTCCACCATGCCGGGCATGATCTGCAAGAACCAGACCTCGAGTTTGACTCGC  
 TACAGCCTGCTTCTACCCGGACGAAGATGACTTCTACTTCGGCGGCCCGACTCGACCCCGGGGGA  
 GGACATCTGGAAGAAGTTTGAGCTGCTGCCACGCCCCCGCTGTCGCCAGCCGTGGCTTCGCGGAGCAC  
 AGCTCCGAGCCCCGAGCTGGGTACGGAGATGCTGCTTGAGAACGAGCTGTGGGGCAGCCCGGGCAGG  
 AGGACGCGTTCGGCCTGGGGGACTGGGTGGCCTACCCCAACCCGGTCCATCTCCAGGACTGCATGTG  
 GAGCGGCTTCCGCCCGGAGAAGCTGGAGCGCGCCGTGAGCGAGAAGCTGCAGCACGGCCGCGGGCCG  
 CCAACCGCGGTTCCACCGCCAGTCCCGGGAGCCGGCGCCGAGCCCTGCGGGTCCGCGGCACGGCC  
 GGGCTGCGGGAGCCGGCCGCGCGGGGCGCCCTGCCCGGAGCTCGCCACCCGGCCCGGAGTGCCT  
 GGATCCCGCCGTGGTCTTCCCTTTCCCGTGAACAAGCGGAGCCAGCGCCCGTCCCGCAGCCCGGCC  
 AGTGCCCGCGCGGGCCCTGCGGTGCGCTCGGGGGCGGGTATTGCCGCCCCAGCCGGGCCCCGGGG  
 TCGCCCTCCGCGCCAGGCGGCCGCCAGACCAGCGGGCGGACCAAGGCCCTCAGTACCTCCGGAGA  
 GGACACCTGAGCGATTAGATGATGAAGATGATGAAGAGGAAGATGAAGAGGAAGAAATCGACGTGGTC  
 ACTGTGGAGAAGCGGCTTCTCCTCCAACACCAAGGCTGTACCACATTCACCATCACTGTGCGTCCCA  
 AGAACGAGCCCTGGGTCCCGGGAGGGCTCAGTCCAGCGAGCTGATCCTCAAACGATGCCTTCCCATCCA  
 CCAGCAGCACAATATGCCGCCCTCTCCCTACGTGGAGAGTGAGGATGACCCCCACAGAAGAAGATA  
 AAGAGCGAGGCGTCCCAAGTCCGCTCAAGAGTGTATCCCCCAAAGGCTAAGAGCTTGAGCCCCGAA  
 ACTCTGACTCGGAGGACAGTGAAGTGCAGAAACCAACATCCTGGAGCGCCAGCGCCCAACGACCT  
 TCGGTCCAGCTTCTCACGCTCAGGGACCAAGTGTGGAGTTGGTAAAGAATGAGAAGGCCCGCAAGGTG  
 GTCATTTTAAAAAGGCCACTGAGTATGTCCACTCCCTCCAGGCCGAGGAGCACCAGCTTTTGTGGAAA  
 AGGAAAATTGCAGGCAAGACAGCAGCAGTTGCTAAAGAAAATTGAACACGCTCGGACTTGC

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
 TGGATTACAAGGATGACGACGA TAAGGTTTAA

**Protein Sequence:**

>RC402789 representing NM\_005378  
 Red=Cloning site Green=Tags(s)

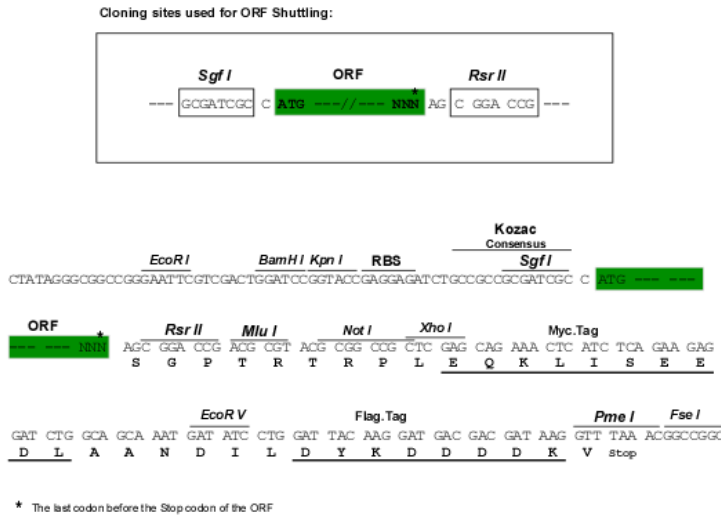
MPSCSTSTMPGMICKNPDLFDSLQPCFYDDEDFYFGGPDSTPPGEDIWKKFELLPTPPLSPSRGFAEH  
 SSEPPSWVTEMLLENELWGSPAEDAFGLGGLGGLTPNPVILQDCMWSGFSAREKLERAVSEKLQHGRGP  
 PTAGSTAQSPGAGAASPAGRGHGAAGAGRAGAALPAELAHAAECVDPVAVVFPVFNKREPAPVPAAPA  
 SAPAAGPAVASGAGIAAPAGAPGVAPPRPGGRQTSGGDHKALSTSGEDTLDSDDEDEDEEEDV  
 TVEKRRSSNTKAVTTFITIVRPKNAALGPGRAQSSELILKRCLPIHQQHNYAAPSYPVESEDAPPQKKI  
 KSEASPRPLKSVIPPKAKSLSPRNSDSEDSERRRNHNILRQRRLRSSFLTLRDHVLELVKNEKAAKV  
 VILKKATEYVHSLQAEHQLLLEKEKLQARQQQLLKKIEHARTC

SGPTRRRLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-RsrII

Cloning Scheme:



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](mailto: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).

RefSeq:

[NP\\_005369](#)

RefSeq Size:

1392 bp

RefSeq ORF:

1395 bp

Locus ID:

4613

Cytogenetics:

2p24.3

Domains:

HLH, Myc\_N\_term

Protein Families:

Druggable Genome, Transcription Factors

MW:

51 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]