

## Product datasheet for RC200889

### NMNAT2 (NM\_170706) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	NMNAT2 (NM_170706) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NMNAT2
Synonyms:	C1orf15; PNAT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200889 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAATCCAGGAACTAGAGGAAATTCAGGCCTGCCAGGGGCTCTGGGAAGTGTGGTACTCTCTCAG  
AAAGAGCCAGGGATTATCTGCACAAAACGGAAGGTTTATTGTGATTGGCGGGATTGTCTCCCTGTCCA  
CGACTCCTATGGAAAACAGGGCCTCGTGTCAAGCCGGCACCGTCTCATCATGTGTCAGCTGGCCGTCCAG  
AATTCTGATTGGATCAGGGTGGACCCTTGGGAGTGTACCAGGACACCTGGCAGACGACCTGCAGCGTGT  
TGGAACACCACCGGGACCTCATGAAGAGGGTACTGGCTGCATCCTCTCCAATGTCAACACACCTTCCAT  
GACACCTGTGATCGGACAGCCACAAAACGAGACCCCCAGCCATTTACCAGAACAGCAACGTGGCCACC  
AAGCCCACTGCAGCCAAGATCTTGGGGAAGGTGGGAGAAAGCCTCAGCCGGATCTGCTGTGTCCGCCGC  
CGGTGGAGCGTTTACCTTTGTAGATGAGAATGCCAATCTGGGCACGGTATGCGGTATGAAGAGATTGA  
GCTACGGATCCTGCTGTGTGGTGTGACTTTGGGATTGTGGTGGTCCCGGGATGCAGCCGACACAGACC  
GAATCATGAATCACTCCTCAATACTCCGCAAATACAAAACAACATCATGGTGGTGAAGGATGACATCAA  
CCATCCCATGTCTGTTGTGAGCTCAACCAAGAGCAGGCTGGCCCTGCAGCATGGGACGGCCATGTTGTG  
GATTACCTGTCCAGCCGGTTCATCGACTACATCCTCAAAGCCAGCTGTACATCAATGCCTCCGGC

**ACGCGT**ACGCGGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



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**Protein Sequence:** >RC200889 protein sequence  
Red=Cloning site Green=Tags(s)

```
MEIQELEEIQACQGLWEVFVTLSEARADYLHKTGRFIVIGGIVSPVHDSYGKQGLVSSRHRLIMCQLAVQ
NSDWIRVDPWECYQDTWQTTCSVLEHHRDLMKRVTCILSNVNTPSMTPVIGQPQNETPQPIYQNSNVAT
KPTAAKILGKVGESLSRICCVRPVVERFTFVDENANLGTVMRYEEIELRIILLCCGSDLLESFCIPGLWNE
ADMEVIVGDFGI VVVPRDAADTRIMNHSSILRKYKNNIMVVKDDINHPMSVSVSSTKSRLALQHG DGHVV
DYLSQPVIDYILKSQLYINASG
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6417\\_b04.zip](https://cdn.origene.com/chromatograms/mk6417_b04.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_170706

**ORF Size:** 906 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.

**RefSeq:** [NM\\_170706.3](#)

**RefSeq Size:** 5467 bp

**RefSeq ORF:** 909 bp

**Locus ID:** 23057

**UniProt ID:** [Q9BZQ4](#)

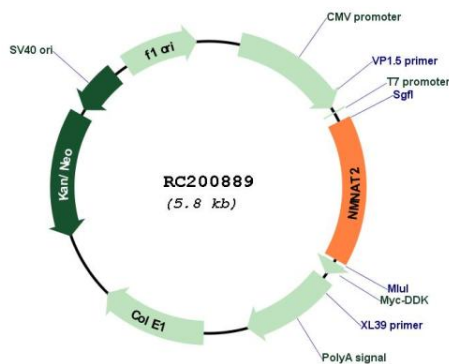
**Cytogenetics:** 1q25.3

**Protein Pathways:** Metabolic pathways, Nicotinate and nicotinamide metabolism

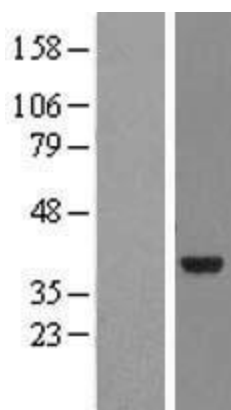
**MW:** 34 kDa

**Gene Summary:** This gene product belongs to the nicotinamide mononucleotide adenylyltransferase (NMNAT) enzyme family, members of which catalyze an essential step in NAD (NADP) biosynthetic pathway. Unlike the other human family member, which is localized to the nucleus, and is ubiquitously expressed; this enzyme is cytoplasmic, and is predominantly expressed in the brain. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

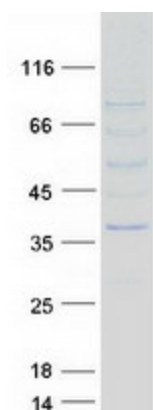
**Product images:**



Circular map for RC200889



Western blot validation of overexpression lysate (Cat# [LY406885]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200889 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NMNAT2 protein (Cat# [TP300889]). The protein was produced from HEK293T cells transfected with NMNAT2 cDNA clone (Cat# RC200889) using MegaTran 2.0 (Cat# [TT210002]).