

Product datasheet for **RR212154**

Nbn (NM_138873) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nbn (NM_138873) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Nbn
Synonyms:	Nbs1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide
Sequence:

>RR212154 representing NM_138873
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTGGAAGCTGCTCCCGCCGCAAGTGGCGCTCCAGGAGAACCATGTCGACTTTTGGCTGGCGTAGAGT
 ACATTGTTGGGAGGAAAACTGTGCCATTCTAATCGAAAAATGATCAGTCAATCAGTCGAAATCATGCTGT
 ATTAAGAGTAAACTTTTCCTGTAACCAAGTTTGTAGTCAAACGGATGAAATTCCTACATTAATAATAAAAGAT
 AATTCTAAGTATGGAACCTTTATTAACGAAGAAAAATGCAGAATGGCCTTTCTCCACTTTGAAGACAG
 GAGATAGAGTTACCTTTGGGGTGTGTTGAAAGTAAATTCAGAGTAGAATACGAGCCTTTGGTTGTTTGCTC
 TTCTTGTTTAGATGTCTCTGGGAAAACTGTTTTAAACCAAGCTATATTACAGCTTGGAGGACTCACTGCA
 AACAGCTGGACAGAAGAGTGTACTCACCTTGCCATGTCATCAGTCAAAGTACCATTAAACTATATGTG
 CACTCATTGTGGACGTCCAATTGTAAGCCAGAATACTTTTCTGAATTTCTCAAAGCAGTTGAGTCCAA
 GACACAACCTCCAGAAATGAAAGTTTTTACCCACCCATCGATGAACCAGCTATTGGAAATAAAAGTGTC
 GATCTGTCCGGACGACGTGAAAGAAAAACAAATCTCAAAGGAAAAACATTCGTGTTTTTAAATGCCAAGC
 AGCATAAGAAACTCGGCTCGGCAGTTGTTTTCGGAGGTGGGAAGCCAGGCTGATGGCAGAAAGGAGTGA
 AGAGGAACAGAGCTTCTTCTCAGCTCCCGGAACCTGTGTTGTTGACGTAGGAATAACAAACACACAGCTC
 ATAATTACGGACTCCCAGAGGAAGTGGATTCAATTTGATAATGGATATACTTCAAAGGCATGATCTCAGAC
 CTATTCCTGAAGCAGAGATTGGATTGGCTGTTATTTTTATGACTACAGAGAGTTACTGTAATCCGCAGGG
 CCAGCCTTGTACAGAGGTAAAGACGACGACTCCAGGACCAAGCCTTTCCAGGGCCTGTCAGCCAATGGA
 AAAGTCATCCCCAGTGCCCAATGAATATGACCACATACGTAGCTGACACAGAATCAGAGCCACAGATA
 CATGTATGTCTCTGAGTAAAAGACCAGAAGAAGTAAAGATCTTTGGACTCGATCAAAACTCTAGAAAGCT
 TTTACAAGGAACATGCAATATAAAGGAGACCTCTAATCAAAGCTCCAATTCCTAACAAATGCAGCATCAAT
 ACACTGGTTAGGGGAAAGGCCCCGAACATCAGCTTTCACCAATGAAATGTCCTGCTGCAAGTAAAAATA
 AAGATTGGTCTTCTCAGCAGCAGCTGAACTCCATCAAAACTACTTCCAGCCATGCTCCAGAAAAAGGGA
 AAGGGATGAAGAAAAATCCAGAACAGTCTCATGCAAAATCGTCAAGAGTGGAACTGTCTTGTCTCTTTTA
 GAACAAACGCAACCTGCAGAACCCTCACTGTGGAAAAGCAAAGACCATGAGTCTCAGAGTGAGACTCTGG
 GCAGGGCATCCAATGCCTCATCTGTGGTGAATAGACATAAAACCCAATGGGAAGAGTCTGACAGTAA
 GTCATTTTCCACAGAAGATCTTAGAGCAAGAAAAAGAAAGAGTGGATTTGTCTACAGAAGAGGAAGTG
 TTGGAAGAGTTACTCAGGAGCACAAAGCCAGAGCTGGCAGTTCAAGTGAAGGTTGAAAAGCAGGAGGCAG
 ATGTCAGCATCAGAAAGAAGCCAGGATGGATGCAGAGAGGAATCAGCACCTGAACGGTGGCCCAGTGCC
 AGAAAGCAACAGCGCACTTCAAGAAGATGAAACAGAAAAGAAAGATGAGCTTCAGATAGAAGCATGGTCA
 ACAAAACGTGAAGTATCTAATACTGATGAGCTTCAGGACAGCAGTGAAGAACTTCCAAGAAAAGTCTGCTG
 TGACTGAATTTAGGCTCACTGGTTGTCCATAATAACTCTTCCAGAAATCTGTGCCACTAAATGGTCGTGG
 TGAAGTGAAGAATTTCAAGAAATCAAGAAGGCTACGTGTCTGGAGCAGGAAAGCTTCCACACATTATT
 GGAGGATCAGATTTAATAGGTCACCATGCTCGAAAGAATACTGAATTAGAAGAGTGGTTGAAACATGAAA
 TGGAGGTACAGAAACAACAAGCGAAAGAAGACTCTCTTGCTGATGATCTGTTTAGATATAATCCTAATGT
 AAAAGAAGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR212154 representing NM_138873
 Red=Cloning site Green=Tags(s)

MWKLPAASAAPGEPCLLAGVEYIVGRKNCAILIENDQISRNHAVLRVNFVPTLSQTDEIPTLI IKD
 NSKYGTFINEEKMQNGLSSTLKTGDRVTFGVFESKFRVEYEPLVVCSSCLDVSGKTVLNQAILQLGGLTA
 NSWTEECTHLAMSSVKVTIKTICALICGRPIVKPEYFSEFLKAVESKTQPPEIESFYPPIDEPAIGNKSV
 DLSGRRRERKQIFKGTFFVFLNAKQHKKLGSAVVFGGGEARLMAEGGEEEQSFFSAPGTCVVDVGITNTQL
 IITDSQRKWIHLIMDILQRHDLRPIPEAEIGLAVIFMTTESYCNPQGQPCTEVKTTTPGPSLSQGLSANG
 KVIPSAPNMNTTYVADTESEPADTCMSLSERPEEVKIFGLDQNSRKLQGTGTCNIKETSNSQSSNSNNAASN
 TLVVRGKAPNYQLSPMKCPAASKNKDWSSQQQLNSIKNYFQPCSRKRERDEENPEQSSCKSSRVELSCSL
 EQTPAEPSSLWKSQDHESQSETLGRASNASSVGGIDIKPNGKSPDSSKSFSTEDLRARKRKEVDLSTEEV
 LEELLRSTKPELAVQVKEKQEAADVIRKKPRMDAERNQHLNGGPVPESSALQEDETEKKDELQIEAWS
 TKREVSNTDELQDSSEELPRKLLLTEFRSLVVHNNSSRNLCPNLRGELKNFKFKKATCPGAGKPLPHII
 GSDLIGHHARKNTELEEWLKHMEVQKQAKEDSLADDLFRYNPNVKRR

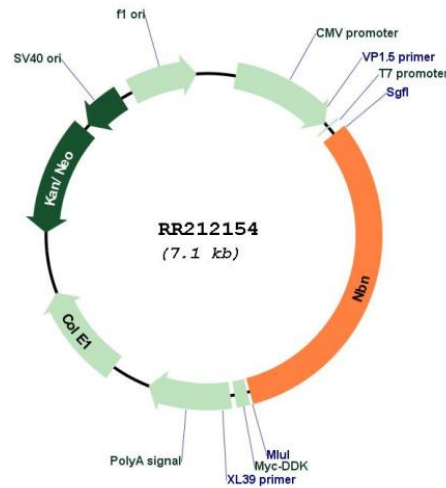
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_138873

ORF Size: 2250 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_138873.2](#), [NP_620228.1](#)

RefSeq Size: 2601 bp

RefSeq ORF: 2253 bp

Locus ID: 85482

UniProt ID: [Q9JIL9](#)

Cytogenetics: 5q13

MW: 83.3 kDa

Gene Summary: may be involved in regulation of cardiomyocyte proliferation; may act in a complex with MRE11 and RAD50 to play roles in DNA repair, activation of cell cycle checkpoints, and telomere maintenance [RGD, Feb 2006]