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Product datasheet for RC224002

NNT (NM_012343) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NNT (NM_012343) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NNT
Synonyms:	GCCD4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC224002 representing NM_012343
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCAAACCTATTGAAAACAGTGGTGACTGGCTGCTCGTGTCCTCTACTTAGCAATTTGGGGTCCTGTA
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ATTGCGGCTCCCAATCTAGCCTTTTCTCAGATGGTGACCACTTTTGGCTTGGCTGGCATTGTGGGGTATC
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC224002 representing NM_012343
Red=Cloning site Green=Tags(s)

MANLLKTVVTGCSCPLLSNLGSCKGLRVKKDFLRTFYTHQELWCKAPVKPGIPYKQLTVGVPKEIFQNEK
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FGRFFTGQITAAGKVPPAKILIVGGGVAGLASAGAAKSMGAIVRGFDTRAAALEQFKSLGAEPLEVDLKE
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ALAAFISSVNIAGGFLVTQRMLDMFKRPTDPPEYNYLYLLPAGTFVGGYLAALYSGYNIEQIMYLGSGLC
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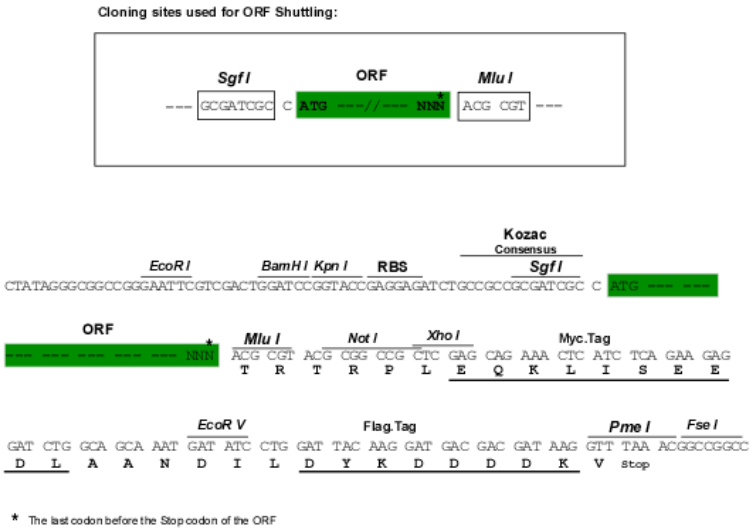
Chromatograms:

https://cdn.origene.com/chromatograms/mk6169_h04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_012343

ORF Size: 3258 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_012343.4

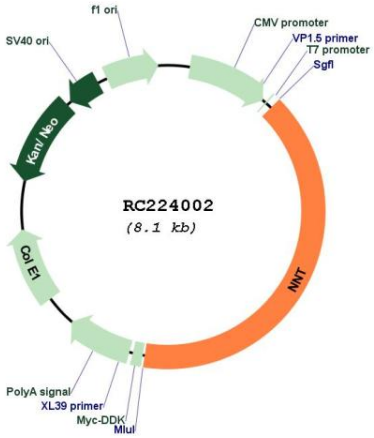
RefSeq Size: 4600 bp

RefSeq ORF: 3261 bp

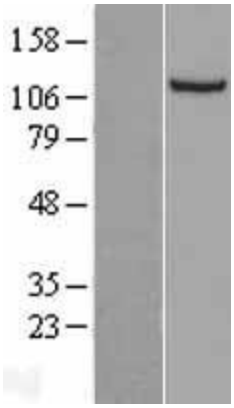
Locus ID: 23530

UniProt ID:	Q13423
Cytogenetics:	5p12
Domains:	PNTB, AlaDh_PNT_C, AlaDh_PNT_N
Protein Families:	Transmembrane
Protein Pathways:	Metabolic pathways, Nicotinate and nicotinamide metabolism
MW:	113.7 kDa
Gene Summary:	This gene encodes an integral protein of the inner mitochondrial membrane. The enzyme couples hydride transfer between NAD(H) and NADP(+) to proton translocation across the inner mitochondrial membrane. Under most physiological conditions, the enzyme uses energy from the mitochondrial proton gradient to produce high concentrations of NADPH. The resulting NADPH is used for biosynthesis and in free radical detoxification. [provided by RefSeq, Sep 2016]

Product images:



Circular map for RC224002



Western blot validation of overexpression lysate (Cat# [LY402197]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224002 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).