

## Product datasheet for **SC126852**

### NNT (NM\_182977) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	NNT (NM_182977) Human Untagged Clone
Tag:	Tag Free
Symbol:	NNT
Synonyms:	GCCD4
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_182977, the custom clone sequence may differ by one or more nucleotides

```

ATGGCAAACCTATTGAAAACAGTGGTACTGGCTGCTCGTGCCTCTACTTAGCAATTTGGGGTCTGTGTA
AGGGTCTACGTGTGAAGAAGGATTTTTACGAACATTTTATACTACCAAGAAGTGGTGTAAAGCGCC
TGTAAAACCAGGAATTCATATAAGCAACTGACTGTTGGAGTCCCAAAGAGATTTCCAAAATGAGAAG
CGAGTGGCATTGTCTCCTGCTGGTGTTCAGAACTTGGTCAAGCAGGGTTTTAATGTTGTCGTGGAATCGG
GTGCGGGCGAAGCTTCCAAGTTCAGATGATCACTATAGAGTGGCAGGTGCCAAATCCAAGGGGCAA
GGAAGTGTGGCTTCTGATTTGGTGGTCAAAGTGCAGCCCTATGGTTAATCCAACATTAGGTGTTTCA
GAAGCTGACCTTTTAAAGACATCAGGAACGCTGATTAGTTTTATTACCCAGCCAAAATCCAGAGTTGC
TAAATAAACTTTCCCAAAGAAAACACTACAGTTCTGGCAATGGACCAGGTTCCAAGAGTCACAATTGCTCA
GGGATATGATGCGCTAAGCTCCATGGCCAACTTGCGGGTTATAAGGCTGTTGTCCTAGCAGCAAATCAT
TTTGGACGTTTTTTTACTGGTCAGATCACAGCTGCTGGAAAAGTTCTCCAGCTAAGATTCTGATAGTTG
GTGGTGGTGTGCTGGGCTTGTCTTGCAGGCGCAGCAAAGTCGATGGGTGCAATTGTTGAGGATTTGA
CACAAGAGCTGCAGCTTTGGAACAGTTCAGTCTCTTGGTGTGAGCCCTGGAGGTGGACTTGAAGGAA
TCTGGTGAAGGACAAGGAGGATATGCAAAGAGATGTCCAAGAGTTCATTGAAGCTGAAATGAACTCT
TTGCTCAACAATGCAAGGAGGTAGACATCCTTATCAGCACAGCACTTATCCAGGTAAAAAGCTCCAGT
TTTATTTAATAAAGAAATGATTGAGTCAATGAAGGAAGTTCAGTTGTTGGATTTAGCTGCTGAGGCT
GGTGGAACTTTGAAACCACTAAGCCAGGAGAAGTCTACATTCATAAGGGAATTACTCACATAGGCTACA
CAGACCTGCCAGCCGAATGGCCACTCAGGCCAGCACCCCTATATTCCAACAACATCACAAAACCTCTGAA
GGCCATCAGCCCGGACAAAGATAATTTTTATTTGATGTGAAAGATGACTTTGACTTTGGTACGATGGGT
CATGTCATTAGAGGAACTGTAGTGATGAAAGATGGTAAAGTATTTTCCAGCTCCACACCGAAAAATA
TTCCTCAAGGTGCCCCAGTAAAACAGAAGACAGTGGCTGAGCTGGAAGCTGAAAAAGCAGCTACCATTAC
ACCCTTCAGGAAGACAATGTCAACGGCTTCTGCATATACAGCAGGTCTCACAGGGATACTGGGTTTGGGC
ATTGCGGCTCCAATCTAGCCTTTTCTCAGATGGTGACCCTTTTGGCTTGGCTGGCATTGTGGGTATC
ATACCGTCTGGGAGTGACCCCTGCTCTCCACTCACCCTGATGTCTGTGACAAATGCAATCTCAGGCT

```



View online »

GACTGCAGTTGGTGGGTTGGCACTGATGGGAGGACATTTGTATCCTTCCACAACCTTCTCAGGGCCTTGCT  
 GCTCTTGTGTCATTTCATATCCTCTGTCAACATTGCAGGTGGCTTTCTGGTGACTCAGAGAATGCTGGACA  
 TGTTCAAGCGTCCCAGTACCCCCAGAAATACAACACCTGTACCTGCTCCCTGCCGGCACCTTTGTTGG  
 TGGATATTTAGCTGCCCTCTACAGTGGTTATAACATTGAACAGATCATGTACCTAGGCTCGGGTTTGTGC  
 TGTGTCGGTGCCTTGGCTGGCCTCTCCACCCAGGGAACAGCACGTCTTGGCAATGCATGGGCATGATTG  
 GGGTTGCTGGAGGACTGGCAGCCACCCTCGGAGTCCTAAAACCGGGCCAGAATTACTAGCTCAGATGTC  
 TGGAGCGATGGCTTTGGGTGGTACCATTGGATTGACAATTGCCAAACGCATCCAGATTTCTGATTTACCT  
 CAATTAGTTGCTGCTTTTACAGTTTAGTGGGTTTGGCAGCTGTACTTACTTGCATAGCTGAGTACATTA  
 TAGAATATCCACATTTTGTACGGATGCAGCAGCAAATCTCACCAAGATTGTGGCCTACCTCGGCACCTTA  
 CATTGGTGGCGTACCTTTAGTGGGTCTCTCATTGCCTATGAAAATTGCAGGGTCTCCTGAAATCTGCC  
 CCTCTCTACTGCCTGGAAGGCACTTACTCAATGCAGGCTTACTGGTGTAGTGTGGGCGGATAATCC  
 CATTATGGTGGACCAAGCTTTACTACTGGCATCACCTGTCTGGGTTTCAAGTGTCTCTCTCTGCTGT  
 CATGGGTGTGACTTTGACAGCTGCTATTGGGGTGTGACATGCCCGTGTATCACTGTGCTGAACAGC  
 TACTCAGGCTGGCCCTGTGTGCAGAGGGCTTCTGCTCAACAACATCTGCTGACCATCGTGGGTGCAC  
 TCATAGGCTCGTCTGGTGTATCTGTGCATACATCATGTGTGGCAATGAATCGCTCCCTGGCTAATGT  
 GATTTCTGGAGGCTATGGCACCCTTCAACAGCTGGTGGAAAACCATGGAATTTCTGGCACACATACG  
 GAAATCAACCTTGACAATGCAATTGACATGATTGAGAAGCTAATAGCATTATTATTACACCAGGCTATG  
 GTCTGTGTGACGCCAAAGCTCAATACCCCATTTGCTGATTTGGTAAAGATGCTCACTGAGCAAGGCAAAA  
 AGTCAGGTTTGAATTCACCCAGTTGCAGGCCAATGCCTGGTCAAGTAAATGTGCTGCTGGCTGAGGCT  
 GGTGTGCCATATGACATTGTGTTGGAATGGATGAGATCAACCATGATTTTCCAGATACTGATTTGGTCC  
 TTGTAATTGGAGCTAATGACACTGTTAATTCAGCAGCTCAAGAAGATCCCAACTTATTATTGCAGGCAT  
 GCCAGTCTTGGAGTCTGAAAATCAAAGCAGGTGATTGTTATGAAGAGGTCTTGGGTGTGGCTATGCT  
 GCAGTGGACAATCCAATCTTCTACAACCTAACACGGCCATGCTTCTAGGTGATGCCAAGAAAACATGTG  
 ACGCGCTCCAGGCGAAAGTTAGAGAATCCTATCAGAAGTAA

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_182977 unedited  
 TTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCGCAGCGCCGCGGG  
 GCCCAAGCCCGGGTCTGCCAGCGCGACGTCTCTCGCGCCCTCAGGGCACAGCCCAAGG  
 CTGTGAGCCTCCCGCCAGTGAATTTGCCTTCAAGGAACTGGGGAGTCAGAAAATTTGG  
 AACTCATATCAACATGGCAACCTATTGAAAACAGTGGTACTGGCTGCTCGTGTCTCT  
 ACTTAGCAATTTGGGTCTGTAAGGGTCTACGTGTGAAGAAGGATTTTTTACGAACATT  
 TTATACTACCAAGAAGTGTGGTGTAAAGCGCCTGTAACCAGGAATCCATATAAGCA  
 ACTGACTGTTGGAGTCCCAAGAGATATTCCAAAATGAGAAGCGAGTGGCATTGTCTCC  
 TGCTGGTGTTCAGAACTTGGTCAAGCAGGGTTTTAATGTTGTCGTGGAATCGGGTGGGG  
 CGAAGCTTCCAAGTTCTCAGATGATCACTATAGAGTGGCAGGTGCCCAAATCCAAGGGG  
 AAAGGAAGTGTGGCTTCTGATTTGGTGGTCAAAGTGCAGCCCTATGGTTAATCCAAC  
 ANTTAGGTGTTTATGAAGCTGACCTTTTAAAGACATCAGGAACGCTGATTAGTTTTATTT  
 ACCCAGCCAAAATCCAGAGTTGCTAAATAAACTTTCCCAAGAAAACACTACAGTTCTGGC  
 AATGGACCAGGTTCCAAGAGTCACAATTGCTCANGGATATGATGCGCTAAGCTCCATGGC  
 CACATTGCGGGTTATAAGGGCTGNTGTCCTAGCACANATCATTTTGGNACGTTTTTACTG  
 GTCAGAAAACAGCTGTTGGAAAAGTTCTCAGCTAGATCTGAAGTGGGG

<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for NM_182977 unedited  GGGGNNNNNAAAAATNTTGACTTGNACCGCGNNCCGCATTCTNANGATCGAGTTTTTTT  TTTTTTTTTTTGGCAACTGATGAACTCTTTTATTAGTCAAAGTTGAATCCACTCAAGTG  CACTTAATATAGTACTACACATTATAAGTTGATCGAAATTAAGAGATCTCCAATTAGAA  ATGGGATCTTCAAAAATACTATTACTAATTTTCAAGTTGTATGTTTCATTGGTATTCTAA  TGAAACATATAAAGCAAATGATTTGTTCCAGCATCTCTGAAAGATTATTTAGTCCTTTA  ATGTATTAATAAGTAGTAGTGAGAAAATGTGCCCTTGAAATATAGACTCTGAAGTACAATTT  AAAAAATTA AAACTGATTTGATATGATTAATTC AAACTGCGGTTGAATTGCAAGGGGACA  GCTCAGAAGTTCAAAAAGTTTCAAATAGTCACATTTGTTGAAAAAAAAAACATAAAAT  GCAGGTGCCTGCAATGTTTACATTGTGTGAGATATTTAGAGCCATGTATAATGTTGTCT  TGAAATCCTAAACACTTAGTTTTTAAAACATTTCTGGTTACTGAGGAGGCATAAAAAAT  CCACAGGACTACATCTAAAATGAAGGCTGTCTTCTCCTTTTATAAATACTTTTGATTCC  TAACACAAAAATATGCACAGAAAGACATTTAGAATTTTCAATCCTTTTAAAAATGAGGG  ATACTGCTTTTAAAAATCTCTAACAGTTTTTGTTCCTTCTTCANCTCATTTTCTCC  AAGAGCTTGCTAAGATGGCATCACCTGTTACTGAACTTTATTGCCTGGTCCAACTGCGA  GGTGGCATATAGCTACAGCTGATCTTAAATTACTCTGAAGGATCTACCTCGCTGGACCC  GACATGTTTCTGGCATACTAAACATGGCGGGTAGTTGTA AAA</p>
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_182977
<b>Insert Size:</b>	4180 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_182977.1</a></u> , <u><a href="#">NP_892022.1</a></u>
<b>RefSeq Size:</b>	4232 bp
<b>RefSeq ORF:</b>	3261 bp
<b>Locus ID:</b>	23530
<b>UniProt ID:</b>	<u><a href="#">Q13423</a></u>
<b>Cytogenetics:</b>	5p12
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	Metabolic pathways, Nicotinate and nicotinamide metabolism

**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]

Transcript Variant: This variant (2) differs in the 5' UTR compared to variant 1. Variants 1 and 2 encode the same isoform (1).