

Product datasheet for **SC320283**

NDUFS2 (NM_004550) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NDUFS2 (NM_004550) Human Untagged Clone
Tag:	Tag Free
Symbol:	NDUFS2
Synonyms:	CI-49; MC1DN6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

Fully Sequenced ORF: >OriGene sequence for NM_004550.3
 GCCCCAGGAGAGGCAGAGAGTGTAGGGAAAGGCCTGGCCGGCATGCACAGATAGGATCAC
 GGTCTGGGAGAAATTCCTGCTCTATAGTCTAACCTACCATGGCTTCTCTTTTCTCAAGG
 CTCCCTCATGCTGCCCTTTGGCCCTAGTGGCTGGTTCCAGGGCTGAGGGGACTGAGTGA
 GCTGCCTGAGAAAAGAGGGTAGGGAACAGAAAAGCCAGCCAGGAGCTGTGGGAGGAAACG
 CCCTCAGTAAAGATGACCGCGGTCACTGTTATCTAAACGCAAGTGAAGCCGAGTCACAGG
 ACCCGGATGTTGTTCAGTTCGACGGTAAACGACCCTGCCAGCTTCCAAGAGGGCGGCTTCA
 CTGTGCGAATAGGTGAGAAGCCAAGAAGGAGGCGCGCTGGAGTTACTTCCGCCGGTCT
 CCTCCCGCAGTCTGCAGCCGGAGTAAGATGGCGCGCTGAGGGCTTTGTGCGGCTTCCG
 GGGCGTCGCGGCCAGGTGCTGCGGCCTGGGGTGGAGTCCGATTGCCGATTCAGCCAG
 CAGAGGTGTTCCGAGTGGCAGCCAGATGTGGAATGGGCACAGCAGTTTGGGGGAGCTGT
 TATGTACCAAGCAAAGAAACAGCCACTGGAAGCCTCCACCTTGAATGATGTGGACCC
 TCCAAAGGACACAATTGTGAAGAACATTACCCTGAACTTTGGGCCCAACACCCAGCAGC
 GCATGGTGTCTCGACTAGTGTGGAATTGAGTGGGAGATGGTGCGGAAGTGTGATCC
 TCACATCGGGCTCTGCACCGAGGCACTGAGAAGCTCATTGAATACAAGACCTATCTTCA
 GGCCCTTCCATACTTTGACCGGCTAGACTATGTGTCCATGATGTGTAACGAACAGGCCTA
 TTCTCTAGCTGTGGAGAAGTTGCTAAACATCCGGCCTCCTCCTCGGGCAGTGGATCCG
 AGTGCTGTTTGGAGAAATCACACGTTTGTGAACCACATCATGGCTGTGACCACACATGC
 CCTGGACCTTGGGGCCATGACCCCTTCTTCTGGCTGTTTGAAGAAAGGGAGAAGATGTT
 TGAGTTCTACGAGCGAGTGTCTGGAGCCCGAATGCATGCTGCTTATATCCGGCCAGGAGG
 AGTGCACCAGGACCTACCCCTTGGGCTTATGGATGACATTTATCAGTTTTCTAAGAACTT
 CTCTCTTCGGCTTGATGAGTTGGAGGAGTTGCTGACCAACAATAGGATCTGGCGAAATCG
 GACAATTGACATTTGGGGTTGTAACAGCAGAAGAAGCACTTAACTATGGTTTTAGTGGAGT
 GATGCTTCGGGGCTCAGGCATCCAGTGGGACCTGCGGAAGACCCAGCCCTATGATGTTTA
 CGACCAGTTGAGTTTGTGTTCTGTTGGTTCTCGAGGGGACTGCTATGATAGGTACCT
 GTGCCGGTGGAGGAGATGCGCCAGTCCCTGAGAATTATCGCACAGTGTCTAAACAAGAT
 GCCTCCTGGGAGATCAAGGTTGATGATGCCAAAGTGTCTCCACCTAAGCGAGCAGAGAT
 GAAGACTTCCATGGAGTCACTGATTCATCACTTTAAGTTGTATACTGAGGGCTACCAAGT
 TCCTCCAGGAGCCACATACTGCCATTGAGGCTCCCAAGGGAGAGTTTGGGGTGTACCT
 GGTGTCTGATGGCAGCAGCCGCCCTTATCGATGCAAGATCAAGGCTCCTGGTTTTGCCA
 TCTGGCTGGTTTGGACAAGATGTCTAAGGGACACATGTTGGCAGATGTCGTTGCCATCAT
 AGGTACCAAGATATTGTATTTGGAGAAGTAGATCGGTGAGCAGGGGAGCAGCGTTTGT
 CCCCCCTGCCTATCAGCTTCTTCTGTGGAGCCTGTTCCCTCACTGGAAATTGGCCTCTGTG
 TGT
 TGTGCATGTAATAAAAGGAGAAATTATAATAAATTAGCCGCTTGCGGCCCTAGGCC
 TAAAAAAAAAAAAAAAAAAAAA

Restriction Sites: Please inquire

ACCN: NM_004550

OTI Disclaimer: 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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_004550.3](#), [NP_004541.1](#)

RefSeq Size: 2061 bp

RefSeq ORF: 1392 bp

Locus ID: 4720

UniProt ID: [O75306](#)

Cytogenetics: 1q23.3

Domains: complex1_49Kd

Protein Pathways: Alzheimer's disease, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease

Gene Summary: The protein encoded by this gene is a core subunit of the mitochondrial membrane respiratory chain NADH dehydrogenase (complex I). Mammalian mitochondrial complex I is composed of at least 43 different subunits, 7 of which are encoded by the mitochondrial genome, and the rest are the products of nuclear genes. The iron-sulfur protein fraction of complex I is made up of 7 subunits, including this gene product. Complex I catalyzes the NADH oxidation with concomitant ubiquinone reduction and proton ejection out of the mitochondria. Mutations in this gene are associated with mitochondrial complex I deficiency. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Oct 2009]

Transcript Variant: This variant (1) encodes the longer isoform (1).