

Product datasheet for **SC304965**

UCP1 (NM_021833) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: UCP1 (NM_021833) Human Untagged Clone
Tag: Tag Free
Symbol: UCP1
Synonyms: SLC25A7; UCP
Mammalian Cell Selection: None
Vector: [pCMV6-XL5](#)
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_021833 edited
AGAGCAAGGGAAAGGAACCTTCCACCTTCGGGGCTGGAGCCCTTTTCCCTCTGCATCTC
CAGTCTCTGAGTGAAGATGGGGGCGCTGACAGCCTCGGACGTACACCCGACCCTGGGGGT
CCAGCTCTTCTCAGCTGGAATAGCGGCGTGCTTGGCGGACGTGATCACCTTCCCGCTGGA
CACGGCCAAAGTCCGGCTCCAGGTCCAAGTGAATGCCCGACGTCCAGTGTATTAGGTA
TAAAGGTGTCCTGGGAACAATCACCGCTGTGGTAAAAACAGAAGGGCGGATGAAACTCTA
CAGCGGGCTGCCTGCGGGCTTCAGCGGCAATCAGCTCCGCCTCTCAGGATCGGCCT
CTACGACACGGTCCAGGAGTTCCCTACCGCAGGGAAAGAAACAGCACCTAGTTTAGGAAG
CAAGATTTAGCTGGTCTAACGACTGGAGGAGTGGCAGTATTATTGGGCAACCCACAGA
GGTCGTGAAAGTCAGACTTCAAGCACAGAGCCATCTCCACGGAATCAAACCTCGCTACAC
GGGGACTTATAATGCGTACAGAATAATAGCAACAACCGAAGGCTTGACGGGTCTTTGGAA
AGGGACTACTCCCAATCTGATGAGAAGTGCATCATCAATTGTACAGAGCTAGTAACATA
TGATCTAATGAAGGAGGCTTTGTGAAAAACAACATATTAGCAGATGACGTCCCCTGCCA
CTTGGTGTGCGCTCTTATCGCTGGATTTTGCGCAACAGCTATGTCTCCCGGTGGATGT
AGTAAAAACCAGATTTATTAATTCTCCACCAGGACAGTACAAAAGTGTGCCCAACTGTGC
AATGAAAGTGTTCACTAACGAAGGACCAACGGCTTTCTTCAAGGGGTTGGTACCTTCCTT
CTTGCGACTTGGATCCTGGAACGTCATTATGTTTGTGTGCTTTGAACAACGAAACGAGA
ACTGTCAAAGTCAAGGCAGACTATGGACTGTGCCACATAA



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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_021833 unedited NNNGGTTGAGTCAGATTTGTATACGACTCATATAGGCGGCCGCGAATTCCTTCCCAGA CAGGAAAGAAGTTCCTCCACCTTCGGGGCTGGAGCCCTTTCTCTGCATCTCCAGTCT CTGAGTGAAGATGGGGGGCTGACAGCCTCGGACGTACACCCGACCCTGGGGTCCAGCT CTTCTCAGCTGGAATAGCGGCGTGCTTGGCGGACGTGATCACCTTCCCGTGGACACGGC CAAAGTCCGGCTCCAGGTCCAAGGTGAATGCCCGACGTCCAGTGTATTAGGTATAAAGG TGTCTGGGAACAATCACCGCTGTGGTAAAAACAGAAGGGCGGATGAAACTCTACAGCGG GCTGCCTGCGGGGCTTCAGCGGCAAATCAGTCCGCCTCTCTCAGGATCGGCCTCTACGA CACGGTCCAGGAGTTCCTCACCGCAGGAAAGAAACAGCACCTAGTTTAGGAAGCAAGAT TTTAGCTGGTCTAACGACTGGAGGAGTGGCAGTATTCATTGGGCAACCCACAGAGTCTGT GAAAGTCAGACTTCAAGCACAGAGCCATCTCCACGGAATCAAACCTCGCTACACGGNGAC TTATAATGCGTACAGAATAATAGCAACAACCGAAGGCTTGACGGGTCTTTGAAAGGGAC TACTCCCAATCTGATGAGAAGTGCATCATCAATTGTACAGAGCTAGTAACATATGATCT AATGAANNAGGCCTTTGTAAAAACAACATATTAGCAGATGACGTCCCTGCCACTTGGTG TCGGCTCTATCGCTGGNATTTGCGCAACAGCTATGTCCTCCCGTGGATGTAGTAAAA ACCCAGATTATTAATCTCN</p>
Restriction Sites:	Please inquire
ACCN:	NM_021833
Insert Size:	1000 bp
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
OTI Annotation:	The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.
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:	<ol style="list-style-type: none"> 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_021833.3 , NP_068605.1

RefSeq Size: 1047 bp

RefSeq ORF: 924 bp

Locus ID: 7350

UniProt ID: [P25874](#)

Cytogenetics: 4q31.1

Protein Families: Druggable Genome

Protein Pathways: Huntington's disease, PPAR signaling pathway

Gene Summary: Mitochondrial uncoupling proteins (UCP) are members of the family of mitochondrial anion carrier proteins (MACP). UCPs separate oxidative phosphorylation from ATP synthesis with energy dissipated as heat, also referred to as the mitochondrial proton leak. UCPs facilitate the transfer of anions from the inner to the outer mitochondrial membrane and the return transfer of protons from the outer to the inner mitochondrial membrane. They also reduce the mitochondrial membrane potential in mammalian cells. Tissue specificity occurs for the different UCPs and the exact methods of how UCPs transfer H⁺/OH⁻ are not known. UCPs contain the three homologous protein domains of MACPs. This gene is expressed only in brown adipose tissue, a specialized tissue which functions to produce heat. [provided by RefSeq, Jul 2008]