

Product datasheet for **MC200793**

Ucp1 (NM_009463) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ucp1 (NM_009463) Mouse Untagged Clone
Tag: Tag Free
Symbol: Ucp1
Synonyms: AI385626; Slc25a7; Ucp
Vector: PCMV6-Kan/Neo
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >BC012701 sequence for NM_009463

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>BC012701 sequence for NM_009463
CCACGCGTCCGCTGGGCTTAACGGGTCCTCCCTGCCCGAGCAAGAGGAAGGGACGCTCACCTTTGAGCTG
CTCCACAGCGCCGCTCTGCACTGGCACTACCTAGCCCAGGTGGCTCTGCAGGAGTCCGAAGTCCGCGGGT
TTCGTGCCCGCATCAGGCAACAGTGCCACTGTTGTCTTCAGGGCTGAGTCTTTTGTCTTGCACCTCACG
CCTCTCTGCCCTCCAAGCCAGGATGGTGAACCCGACAACCTCCGAAGTGAACCCACCATGGGGTCAAG
ATCTTCTCAGCCGGAGTTTCAGCTTGCCTGGCAGATATCATCACCTTCCCCTGGACACTGCCAAAGTCC
GCCTTCAGATCCAAGGTGAAGGCCAGGCTTCCAGTACCATTAGGTATAAAGGTGCTTAGGGACCATCAC
CACCTGGCAAAAACAGAAGGATTGCCGAACTGTACAGCGGTCTGCCTGCGGGCATTTCAGAGGCAATC
AGCTTTGCCTCACTCAGGATTGGCTCTACGACTCAGTCCAAGAGTACTTCTCTTCAGGGAGAGAAACAC
CTGCCTCTCTCGGAAACAAGATCTCAGCCGGCTTAATGACTGGAGGTGTGGCAGTGTTCATTGGGCAGCC
TACAGAGGTCTGTAAGGTCAGAATGCAAGCCCAGAGCCATCTGCATGGGATCAAACCCCGCTACACGGGG
ACCTACAATGCTTACAGAGTTATAGCCACCACAGAAAGCTTGTCAACACTTTGGAAAGGGACGACCCCTA
ATCTAATGAGAAATGTCATCATCAATTGTACAGAGCTGGTAACATATGACCTCATGAAGGGGGCCCTTGT
AAACAACAAAATACTGGCAGATGACGTCCCCTGCCATTTACTGTCAGCTCTTGTGCGGGTTTTGCACC
ACACTCCTGGCCTCTCCAGTGGATGTGGTAAAAACAAGATTTCATCACTCTTCCAGGACAGTACCCAA
GCGTACCAAGCTGTGCGATGTCCATGTACACCAAGGAAGGACCGCGCCTTTTTCAAAGGTTTTGTGGC
TTCTTTTCTGCGACTCGGGTCTTGAACGTCATCATGTTTGTGTGCTTTGAACAGCTGAAAAAAGAGCTG
ATGAAGTCCAGACAGACAGTGGATTGTACCACATAAGCAACTTGGAGGAAGAGATACTGAACATCATTGG
GCTTCTATGCTGGGAGACCACGAATAAAACCAACCAAGAAATCAAAAAAAAAAAAAAAAAA
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Restriction Sites: RsrII-NotI
ACCN: NM_009463
Insert Size: 924 bp



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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).
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:	BC012701 , AAH12701
RefSeq Size:	1249 bp
RefSeq ORF:	924 bp
Locus ID:	22227
UniProt ID:	P12242
Cytogenetics:	8 39.65 cM
Gene Summary:	Mitochondrial protein responsible for thermogenic respiration, a specialized capacity of brown adipose tissue and beige fat that participates to non-shivering adaptive thermogenesis to temperature and diet variations and more generally to the regulation of energy balance (PubMed:9139827, PubMed:19187776, PubMed:23063128, PubMed:27027295). Functions as a long-chain fatty acid/LCFA and proton symporter, simultaneously transporting one LCFA and one proton through the inner mitochondrial membrane. However, LCFAs remaining associated with the transporter via their hydrophobic tails, it results in an apparent transport of protons activated by LCFAs. Thereby, dissipates the mitochondrial proton gradient and converts the energy of substrate oxydation into heat instead of ATP (PubMed:23063128). Regulates the production of reactive oxygen species/ROS by mitochondria (PubMed:20416274, PubMed:20466728).[UniProtKB/Swiss-Prot Function]