

Product datasheet for **MC204209**

Sirt3 (NM_022433) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Sirt3 (NM_022433) Mouse Untagged Clone
Tag: Tag Free
Symbol: Sirt3
Synonyms: 2310003L23Rik; A1848213; Sir2I3
Mammalian Cell Selection: Neomycin
Vector: PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection: Kanamycin (25 ug/mL)
Fully Sequenced ORF: >BC025878

```
CGCTAAGCGGTGCGACTGGCATTGGCCGCGCTCAGACTGTGGGGTCCGGGAGTGTTACAGGTGGGAGAAGG
CCCATATCCCTCTGTGTGGGAGCCTCAGGCGGCTTTGGAGGTGGAGGAAGCAGTGAGAAGAAGTTTTCTC
TGCAGGATGTAGCTGAGCTGCTTCGGACCAGAGCCTGCAGTAGGGTGGTGGTCATGGTGGGGCCGGCAT
CAGCACACCCAGTGGCATCCCGGACTTCAGATCCCAGGGAGCGGCCTCTACAGCAACCTTCAGCAGTAT
GACATCCCGTACCCTGAAGCCATCTTTGAACTTGGCTTTTTCTTTCACAACCCCAAGCCCTTTTTCATGT
TGGCCAAGGAGCTGTACCCTGGGCACTACAGGCCAATGTCACTCACTACTTCTGAGGCTCCTCCACGA
CAAGGAGCTGCTTCTGCGGCTCTATACACAGAACATCGACGGCTTGAGAGAGCATCTGGGATCCCTGCC
TCAAAGCTGGTTGAAGCCACGGGACCTTTGTAACAGCTACATGCACGGTCTGTGGAAGTCTTCCAG
GGGAAGACATATGGGCTGATGTGATGGCGGACAGGGTGCCCGCTGCCCTGTCTGTACTGGCGTTGTGAA
ACCCGACATTGTGTTCTTTGGGGAGCAGCTGCCTGCAAGGTTCCCTACTCCATATGGCTGACTTCGCTTTG
GCAGATCTGCTACTCATTCTTGGGACCTCCCTGGAGGTGGAGCCTTTTGCCAGCTTGTCTGAAGCAGTAC
AGAAATCAGTGCCCGGACTGCTCATCAATCGAGACTTGGTGGGGCCGTTCTGTTCTGAGTCCCTCGAAGGAA
AGATGTGGTCCAGCTAGGGGATGTAGTTTATGGTGTGAAAGGCTGGTGGACCTCCTGGGGTGGACACAA
GAACTGCTGGATCTTATGCAGCGGGAACGTGGCAAGCTGGATGGACAGGACAGATAAGACTATGGCTTCT
TCACCTGGGGAAGTCACACAGCAGATCATCCTATGTCCAGCAAGACTTATGCCTGAAGACAGCTCCAAC
ACGTTTACAAACATGAACCAGACCACAACATGTGGCCTGGACAGTGGTCTCCGAGGCTGCCTTTGGAAA
GGCTGACCAGGGATGTCTACCCTTGGGGCCCTCCATGTGTGCGCCCTGTCCACCTCATCACTGCTGAAG
GTGTAGTGCAGGTGCTGCTTTCTGCAGCGGCCCTTAAGTTATCACGAGGGCAGCACAGCAGCCCCGTCG
CAGGCAGGCGATGCACTAGGGCAATCTAGCATGTTGATCGGTAAGTGCCATCTTTAACTACAACATCAT
TTCTTGATGAAATAAACTTAGTATAAAAAAAAAAAAAAAAAA
```

Restriction Sites: RsrII-NotI
ACCN: NM_022433
Insert Size: 774 bp



[View online »](#)

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:	BC025878 , AAH25878
RefSeq Size:	1372 bp
RefSeq ORF:	774 bp
Locus ID:	64384
UniProt ID:	Q8R104
Cytogenetics:	7 F4-F5
Gene Summary:	<p>NAD-dependent protein deacetylase (PubMed:23835326, PubMed:17923681, PubMed:18794531, PubMed:21172655). Activates or deactivates mitochondrial target proteins by deacetylating key lysine residues (PubMed:23835326, PubMed:17923681, PubMed:18794531, PubMed:21172655). Known targets include ACSS1, IDH, GDH, PDHA1, SOD2, LCAD, SDHA and the ATP synthase subunit ATP5PO (PubMed:16790548, PubMed:18794531, PubMed:21172655). Contributes to the regulation of the cellular energy metabolism (PubMed:23835326). Important for regulating tissue-specific ATP levels (PubMed:18794531, PubMed:24252090). In response to metabolic stress, deacetylates transcription factor FOXO3 and recruits FOXO3 and mitochondrial RNA polymerase POLRMT to mtDNA to promote mtDNA transcription (PubMed:23283301).[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (1) has an alternate 5' exon and an additional segment, resulting in a downstream AUG start codon, as compared to variant 3. The resulting isoform (1) is shorter at the N-terminus, as compared to isoform 2.</p>