

SIRT3 Rabbit mAb
Catalog # AP76086**Specification****SIRT3 Rabbit mAb - Product Information**

Application	WB, IHC
Primary Accession	Q9NTG7
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	43573

SIRT3 Rabbit mAb - Additional Information

Gene ID 23410

Other Names

SIRT3

Dilution

WB~~1/500-1/1000

IHC~~1/50-1/100

Format

Liquid

SIRT3 Rabbit mAb - Protein Information

Name SIRT3

Synonyms SIR2L3

Function

NAD-dependent protein deacetylase (PubMed:12186850, PubMed:12374852, PubMed:16788062, PubMed:18680753, PubMed:18794531, PubMed:19535340, PubMed:23283301, PubMed:24121500, PubMed:24252090). Activates or deactivates mitochondrial target proteins by deacetylating key lysine residues (PubMed:12186850, PubMed:12374852, PubMed:16788062, PubMed:18680753, PubMed:<a

[18794531](http://www.uniprot.org/citations/18794531), PubMed:<[23283301](http://www.uniprot.org/citations/23283301)>, PubMed:<[24121500](http://www.uniprot.org/citations/24121500)>, PubMed:<[24252090](http://www.uniprot.org/citations/24252090)>). Known targets include ACSS1, IDH, GDH, SOD2, PDHA1, LCAD, SDHA and the ATP synthase subunit ATP5PO (PubMed:<[16788062](http://www.uniprot.org/citations/16788062)>, PubMed:<[18680753](http://www.uniprot.org/citations/18680753)>, PubMed:<[19535340](http://www.uniprot.org/citations/19535340)>, PubMed:<[24121500](http://www.uniprot.org/citations/24121500)>, PubMed:<[24252090](http://www.uniprot.org/citations/24252090)>). Contributes to the regulation of the cellular energy metabolism (PubMed:<[24252090](http://www.uniprot.org/citations/24252090)>). Important for regulating tissue-specific ATP levels (PubMed:<[18794531](http://www.uniprot.org/citations/18794531)>). 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](http://www.uniprot.org/citations/23283301)>). Acts as a regulator of ceramide metabolism by mediating deacetylation of ceramide synthases CERS1, CERS2 and CERS6, thereby increasing their activity and promoting mitochondrial ceramide accumulation (By similarity). Regulates hepatic lipogenesis. Uses NAD(+) substrate imported by SLC25A47, triggering downstream activation of PRKAA1/AMPK-alpha signaling cascade that ultimately downregulates sterol regulatory element-binding protein (SREBP) transcriptional activities and ATP-consuming lipogenesis to restore cellular energy balance.

Cellular Location

Mitochondrion matrix

Tissue Location

Widely expressed.

SIRT3 Rabbit mAb - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SIRT3 Rabbit mAb - Images



