

Mouse Anti-SIRT1/SIR2 [MD433]: MC0673, MC0673RTU7

Intended Use: For Research Use Only

Description: SIRT1, also known as SIR2 or SIR2L1, is a pivotal member of the sirtuin family, and functions as an NAD⁺-dependent deacetylase that plays a critical role in regulating various cellular processes, including transcriptional regulation, DNA damage repair, cell cycle progression, and aging. By deacetylating key substrates such as the tumor suppressor protein p53, SIRT1 modulates essential pathways involved in stress responses, metabolic control, and longevity, making SIRT1 a vital target for research into age-related diseases, cancer, and metabolic disorders.

Specifications:

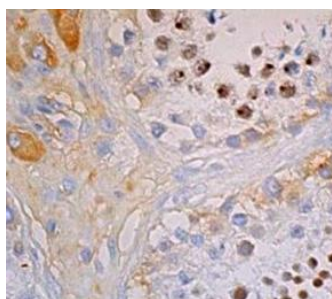
Clone:	MD433
Source:	Mouse
Isotype:	IgG1k
Immunogen:	Human SIRT1 aa 448-747
Reactivity:	Human, mouse, rat
Localization:	Nucleus
Formulation:	Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN ₃)
Storage:	Store at 2°- 8°C
Applications:	IHC, ELISA, IF, IP, WB
Package:	

Description	Catalog No.	Size
SIRT1/SIR2 [MD433] Concentrated	MC0673	1 ml
SIRT1/SIR2 [MD433] Prediluted	MC0673RTU7	7 ml

IHC Procedure*:

Positive Control Tissue:	Testis, cerebral cortex, hippocampus, colorectal adenocarcinoma, lung and kidney cancer
Concentrated Dilution:	25-200
Pretreatment:	Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes at RT
Detection:	Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human testis stained with anti-SIRT1 using DAB

References:

1. AdipoRon promotes amyloid- β clearance through enhancing autophagy via nuclear GAPDH-induced sirtuin 1 activation in Alzheimer's disease. Fengjiao Sun, et al. Br J Pharmacol. Sep;181(17):3039-3063, 2024. doi: 10.1111/bph.16400.
2. Thymoquinone protects the testes of hypothyroid rats by suppressing pro-inflammatory cytokines and oxidative stress and promoting SIRT1 testicular expression. Sami A Algaidi, et al. Front Pharmacol. Nov 24;13:1040857, 2022. doi: 10.3389/fphar.2022.1040857.

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