

SIRT1 Mouse Monoclonal

Antibody

Background:

The Sir2 protein in yeast is known to function in transcriptional silencing processes through the deacetylation of histones H3 and H4. The more recently described human homologue of Sir2, known as SIRT1, has been found to associate with the tumor suppressor protein p53.SIRT1 binds and deacetylates p53 with specificity for its C-terminal Lys382 residue in response to the upregulation of promyelocytic leukemia protein (PML) nuclear bodies or oncogenic Ras. The deacetylation of p53 SIRT1 has been shown to negatively regulate p53-mediated transcription, preventing cellular senescence and apoptosis induced by DNA damage and stress.SIRT1 has the closest homology to the yeast Sir2p and is widely expressed in fetal and adult tissues, with high expression in heart, brain and skeletal muscle and low expression in lung and placenta.

Catalog Number: E10-30086

Amount: 100μg/100μl

Clone Number: 1F3

Species: Mouse lgG1
MW: 120kDa
Aliases: SIR2L1; SIRT1

Entrez Gene: 23411

Immunogen: Purified recombinant fragment of human SIRT1 expressed in E. Coli.

Storage: Store at 4° C, for long term storage, store at -20 $^{\circ}$ C.

Formulation: Ascitic fluid containing 0.03% sodium azide.

Species Reactivities: Human; Monkey

Tested Applications: WB, IHC, IF, FC, ELISA. Not yet tested in other applications.

Application notes: WB: 1/500 - 1/2000, IHC: 1/200-1/1000, IF: 1/200-1/1000, FC: 1/200-1/400,

ELISA: Propose dilution 1/10000.

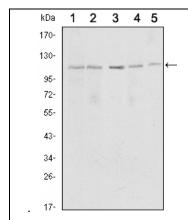


Figure 1: Western blot analysis using SIRT1 mouse mAb against MCF-7 (1), Jurkat (2), Hela (3), HEK293 (4) and A549 (5) cell lysate.

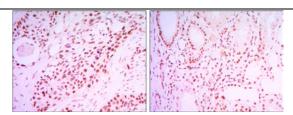


Figure 2: Immunohistochemical analysis of paraffin-embedded lung cancer tissues (left) and kidney cancer tissues (right) using SIRT1 mouse mAb with DAB staining.

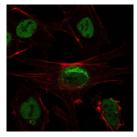


Figure 3: Immunofluorescence analysis of NTERA-2 cells using SIRT1 mouse mAb (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.