Product Name: SIRT1 Mouse Monoclonal Antibody
Catalog #: AMM80879
For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,IHC,ICC,ELISA,FC
Reactivity	Human,Mouse,Rat,Rabbit,Monkey
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in PBS with 0.05% sodium azide.
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:200-1:1000,ICC 1:200-1:1000,ELISA 1:5000-1:20000,FC 1:200-1:400
Molecular Weight	120kDa

Antigen Information

Gene Name	SIRT1
Alternative Names	SIR2L1; SIRT1
Gene ID	23411.0
SwissProt ID	Q96EB6
Immunogen	Purified recombinant fragment of human SIRT1 expressed in E. Coli.

Background

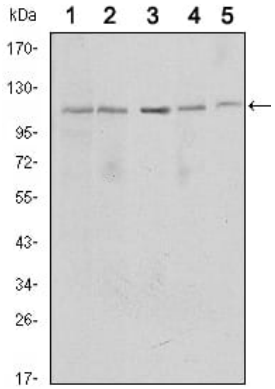
The Sir2 protein in yeast is known to function in transcriptional silencing processes through the deacetylation of histones H3 and H4. The more recently described human homologue of Sir2, known as SIRT1, has been found to associate with the tumor suppressor protein p53.SIRT1 binds and deacetylates p53 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. SIRT1 regulates the p53-dependent DNA damage response pathway by binding to and deacetylating p53, specifically at Lysine 382.

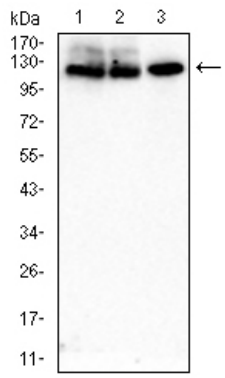
Research Area

Apoptosis

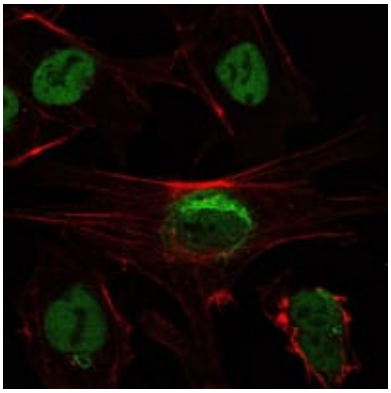
Image Data



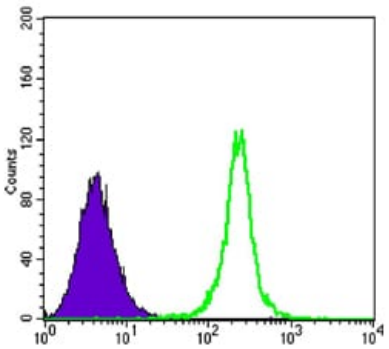
Western blot analysis using SIRT1 mouse mAb against MCF-7 (1), Jurkat (2), Hela (3), HEK293 (4) and A549 (5) cell lysate.



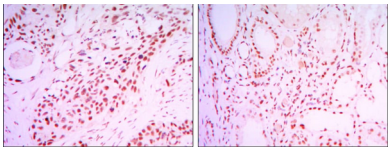
Western blot analysis using SIRT1 mouse mAb against L1210(1),F9,(2),Hela(3) cell lysate.



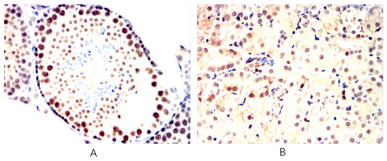
Immunofluorescence analysis of NTERA-2 cells using SIRT1 mouse mAb (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



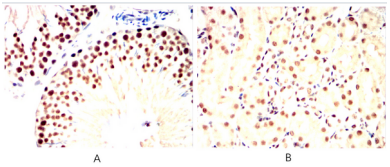
Flow cytometric analysis of K562 cells using SIRT1 mouse mAb (green) and negative control (purple).



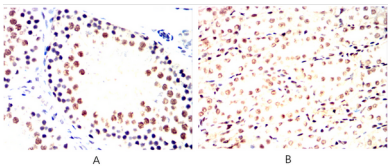
Immunohistochemical analysis of paraffin-embedded human lung cancer tissues (left) and kidney cancer tissues (right) using SIRT1 mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded Mouse testis(A)Mouse kidney(B) using SIRT1 mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded Rat spleen(A)Rat liver(B) using SIRT1 mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded Rabbit spleen(A)Rabbit liver(B) using SIRT1 mouse mAb with DAB staining.