



## SIRT1 Mouse mAb

**E2220016****Catalog Number:**E2220016**Amount:**100ul**Product Name:**HSIRT1 Mouse mAb**Gene ID:**23411**SwissProt ID:**Q96EB6**Gene Name:**SIRT1**Alternative Names:**SIR2L1; SIRT1

**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.

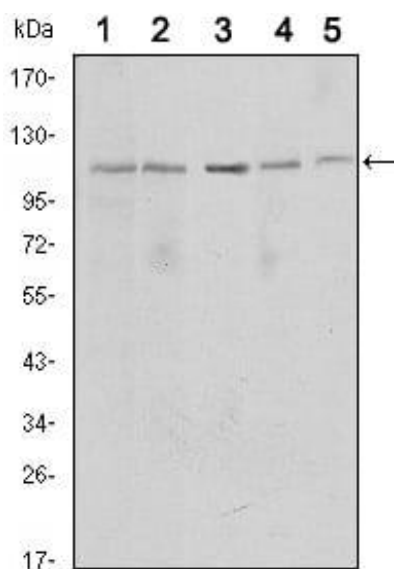
**Research Field:**Cell Biology**Product Categories:**Primary antibody**Host:**Mouse**Reactivity:**Human**Application:**WB,IHC-P,ICC/IF,FC**Dilution Ratio:**WB: 1/500-1/1000 IHC: 1/100-1/200 IF: 1/50-1/200 FC: 1/50-1/100**Molecular Weight:**Calculated MW: 82 kDa;Observed MW: 110 kDa**Clonality:**Monoclonal Antibody**Clonality No.:**4E2-H9-M8**Isotype:**Mouse IgG1**Immunogen:**Purified recombinant fragment of human SIRT1 expressed in E. Coli.**Purification:**Affinity Purified**Conjugation:**Unconjugated**Modification:**Unmodified

**For Research Use Only**

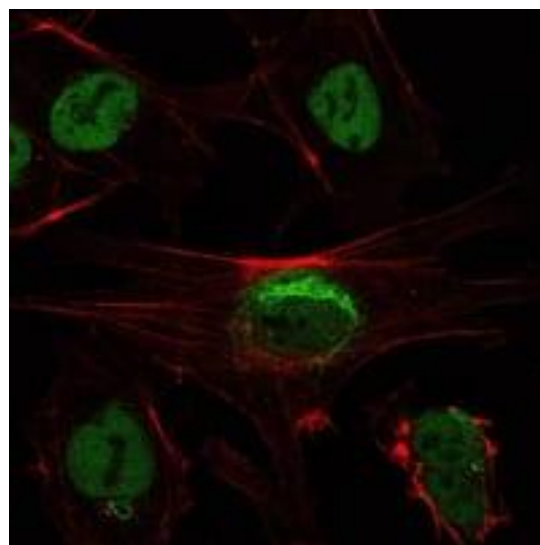
**Form:** Liquid

**Buffer System:** Ascitic fluid containing 0.03% sodium azide.

**Storage:** Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.



Western blot analysis of SIRT1 in MCF-7 (1), Jurkat (2), HeLa (3), HEK293 (4) and A549 (5) cell lysate using SIRT1 antibody.



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