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Product datasheet for TA336801

SIRT1 Mouse Monoclonal Antibody [Clone ID: 1F3]

Product data:

Product Type:	Primary Antibodies
Clone Name:	1F3
Applications:	ELISA, FC, ICC/IF, IHC, WB
Recommended Dilution:	Flow (Intracellular), Immunohistochemistry Free-Floating, Flow Cytometry: 1 ug per million cells, ELISA: 1:10000, Immunohistochemistry: 1:200-1:1000, Immunocytochemistry/ Immunofluorescence: 1:10-1:1000, Immunohistochemistry-Paraffin: 1:200-1:1000, Western Blot: 1:500-1:2000
Reactivity:	Human, Mouse, Rat, Primate
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Purified recombinant fragment of human SIRT1 expressed in E. coli. [UniProt# Q96EB6]
Formulation:	PBS, 0.03% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	Ammonium sulfate precipitation
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	120 kDa
Gene Name:	sirtuin 1
Database Link:	NP_036370 Entrez Gene 93759 MouseEntrez Gene 309757 RatEntrez Gene 23411 Human Q96EB6

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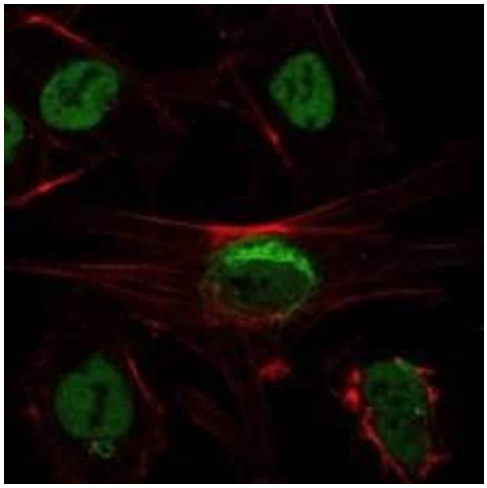
Background: SIRT1, the human homolog of the S. cerevisiae Sir2 protein, functions as an NAD-dependent deacetylase of a number of nonhistone substrates including p53. In response to DNA damage, SIRT1 binds and deacetylates the p53 protein at c-terminal Lys382 residue and attenuate p53-mediated functions. When overexpressed in mouse embryo fibroblasts, SIRT1 antagonizes PML-induced acetylation of p53 and rescues PML-mediated premature cellular senescence. In mammalian cells, SIRT1 appears to control the cellular response to stress by regulating the FOXO family of forkhead transcription factors.

Synonyms: SIR2; SIR2alpha; SIR2L1

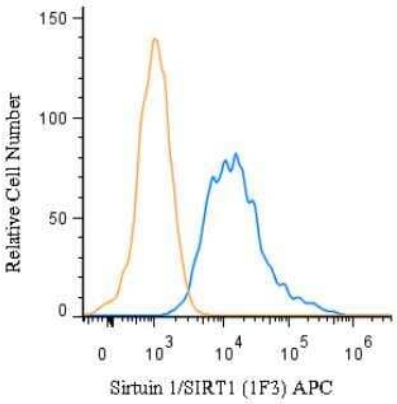
Note: This SIRT1 (1F3) antibody is useful for Western blot, Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunohistochemistry on paraffin-embedded sections and ELISA.

Protein Families: Druggable Genome, Stem cell - Pluripotency, Transcription Factors

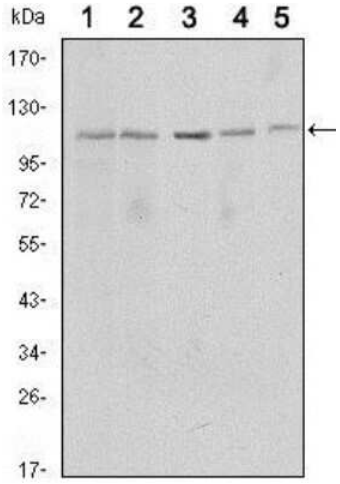
Product images:



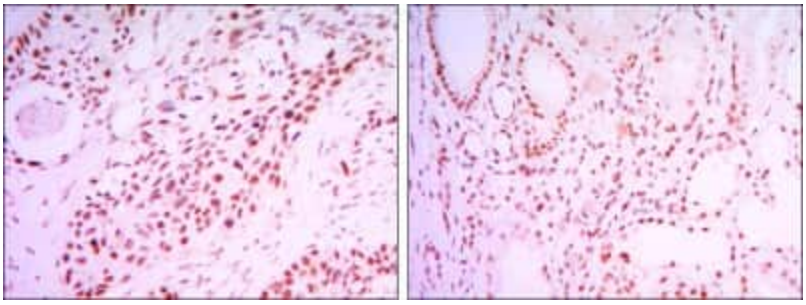
Immunocytochemistry/Immunofluorescence: Sirtuin 1/SIRT1 Antibody (1F3) TA336801 - Analysis of NTERA-2 cells using SIRT1 mouse mAb (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



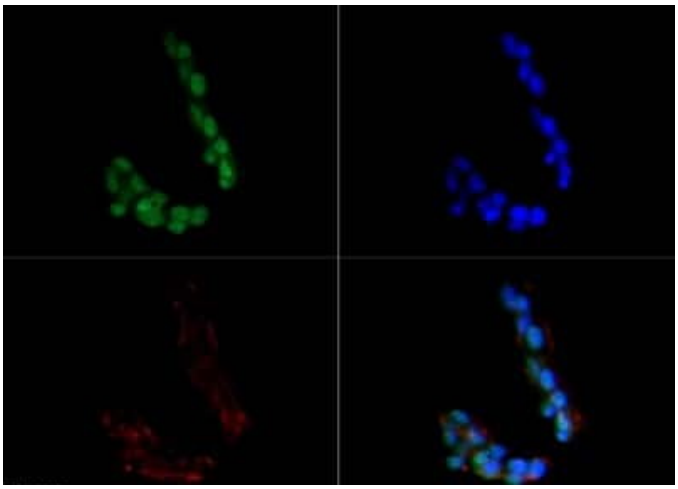
Flow (Intracellular): Sirtuin 1/SIRT1 Antibody (1F3) TA336801 - An intracellular stain was performed on RAW 246.7 cells with Sirtuin 1/SIRT1 Antibody (1F3) TA336801APC (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeablized with 0.1% saponin. Cells were incubated in an antibody dilution of 2.5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Allophycocyanin.



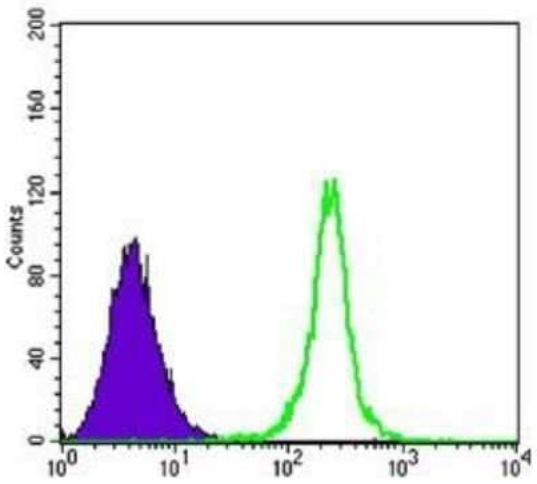
Western Blot: Sirtuin 1/SIRT1 Antibody (1F3) TA336801 - Western blot analysis using SIRT1 mouse mAb against MCF-7 (1), Jurkat (2), Hela (3), HEK293 (4) and A549 (5) cell lysates.



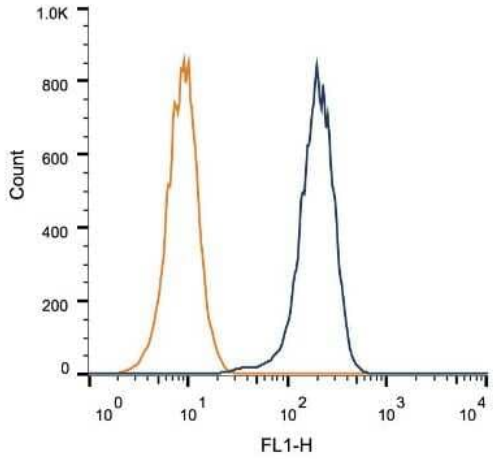
Immunohistochemistry-Paraffin: Sirtuin 1/SIRT1 Antibody (1F3) TA336801 - Immunohistochemical analysis of paraffin-embedded lung cancer tissues (left) and kidney cancer tissues (right) using SIRT1 mouse mAb with DAB staining.



Immunocytochemistry/Immunofluorescence: Sirtuin 1/SIRT1 Antibody (1F3) TA336801 - SIRT1 antibody was tested at 1:10 in Ntera2 cells with Dylight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red). Image objective 40x.



Flow Cytometry: Sirtuin 1/SIRT1 Antibody (1F3) TA336801 - Flow cytometric analysis of K562 cells using SIRT1 mouse mAb (green) and negative control (purple).



Flow Cytometry: Sirtuin 1/SIRT1 Antibody (1F3) TA336801 - Intracellular flow cytometric staining of 1 x 10^6 HEK-293 cells using SIRT1 antibody (dark blue). Isotype control shown in orange. An antibody concentration of 1 ug/1x10^6 cells was used.