

OriGene Technologies, Inc.

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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: FC, IF, IHC, WB

Recommend Dilution: WB: 1:500-1:2000, ELISA: 1:10000, FC: 1 ug per million cells, IF: 1:10-1:1000, IHC: 1:200-1:1000,

IHC-P: 1:200-1:1000

Reactivity: Human, Mouse, Primate, Rat

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: 1 mg/ml

Purification: Ammonium sulfate precipitation

Predicted Protein Size: 120 kDa
Gene Name: sirtuin 1

Database Link: NP 036370 Entrez Gene 93759 MouseEntrez Gene 309757 RatEntrez Gene 23411 Human

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.

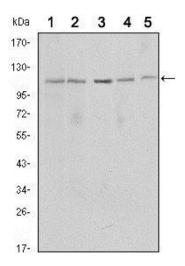




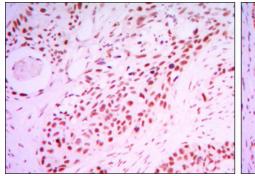
Protein Families:

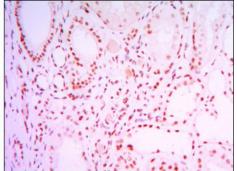
Druggable Genome, Stem cell - Pluripotency, Transcription Factors

Product images:

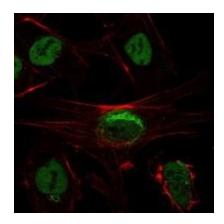


Western Blot: SIRT1 Antibody (1F3) TA336801 - Western blot analysis using SIRT1 mouse mAb against MCF-7 (1), Jurkat (2), Hela (3), HEK293 (4) and A549 (5) cell lysates.



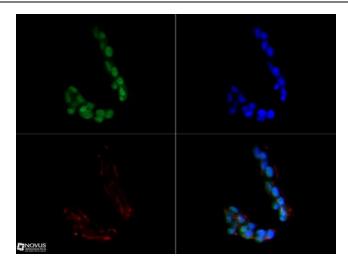


Immunohistochemistry-Paraffin: SIRT1 Antibody (1F3) TA336801 - Immunohistochemical analysis of paraffin-embedded lung cancer tissues (left) and kidney cancer tissues (right) using SIRT1 mouse mAb with DAB staining.

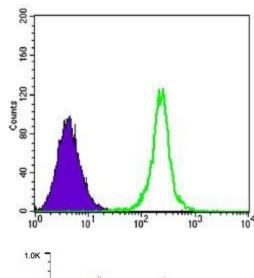


Immunocytochemistry/Immunofluorescence: SIRT1 Antibody (1F3) TA336801 - Analysis of NTERA-2 cells using SIRT1 mouse mAb (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

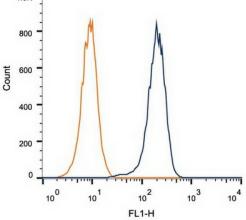




Immunocytochemistry/Immunofluorescence: SIRT1 Antibody (1F3) TA336801 - SIRT1 antibody was tested at 1:10 in Ntera2 cells with Dylight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red). Image objective 40x.



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



Flow Cytometry: 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.