

Diagenode sa

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Product name:
antibody directed against human hSirT1
(NAD-dependent deacetylase situin-1)
Other names: hSIR2, SIR2-like protein 1, SIR2L1

Catalog #: MAb-063-050	Type: Monoclonal IgG1	Size: 50 µg/ 72 µl
Lot #: 001	Source: Mouse	Concentration: 0.7 µg/µl

Description: This antibody has been raised against a synthetic peptide of the human SirT1 protein.

SirT1 is a NAD-dependent deacetylase, which regulates processes such as apoptosis and muscle differentiation by deacetylating key proteins (see overview below).

Specificity: Human: positive
Other species: not tested

Applications	Suggested dilution	References
ELISA	Not tested	
Dot blotting	Not tested	
Western blotting	1:500	Fig 1
Gel Supershift	Not tested	
Immunochemistry	Not tested	
Flow cytometry	Not tested	
Immunoprecipitation	Not tested	
ChIP	Not tested	

Format: In solution in PBS including 0.05% azide and 0.05% ProClin 300. The monoclonal antibody has been protein G purified.

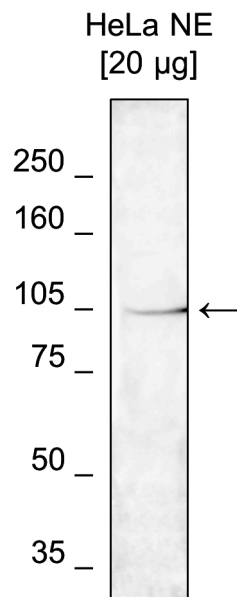
Storage: For long storage, store at -20°C/ -80°C. Avoid multiple freeze-thaw cycles.

Precautions: This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Availability date: December 21, 2007. Last data sheet update: February 1, 2008

Lot #: 001/ purification day: April 26, 2007

Figure 1



Western blot analysis using the Diagenode purified antibody anti-hSirT1.

Western blot was performed using nuclear extracts from HeLa cells (HeLa NE, 20 µg) and the Diagenode purified monoclonal antibody directed against hSirT1 (cat# MAb-063-050) at dilution 1:500 in TBS-Tween + 5% skimmed milk. On the left side, a molecular weight marker is shown (in kDa). The arrow indicates the location of the protein of interest.

Overview

SirT1 deacetylates 'Lys-382' of p53/TP53 and impairs its ability to induce the proapoptotic program and modulate cell senescence. SirT1 deacetylates TAF1B and thereby represses rDNA transcription by the RNA polymerase I. SirT1 is involved in HES1- and HEY2-mediated transcriptional repression and inhibits skeletal muscle differentiation by deacetylating PCAF and MYOD1.

SirT1 interacts with TAF1B and is found in a complex with PCAF and MYOD1 (By similarity). SirT1 also interacts with MLLT7/FOXO4, HES1, HEY2, p53/TP53 and PML. SirT1 is recruited to the nuclear bodies via its interaction with PML.

(UniProtKB/Swiss-Prot entry Q96EB6: <http://www.expasy.org/uniprot/Q96EB6>)