

Anti-SIRT3

Rabbit Polyclonal Antibody

Catalog # S37-463R

Lot # O2121-34

Cited Applications

WB, ELISA

Ideal working dilutions for each application should be empirically determined by the investigator.

Specificity

Recognizes the SIRT3 protein

Cross Reactivity

Human, Mouse and Rat

Host/Isotype/Clone#

Rabbit, IgG

Immunogen

SIRT3 antibody was raised against a 17 amino acid synthetic peptide near the center of human SIRT3

Formulation

PBS + 0.02% sodium azide

Stability

1yr at -20°C from date of shipment

Scientific Background

SIRT3 is a member of the class I of the Sirtuin family that is characterized by a Sirtuin core domain. Sirtuin are grouped into four classes and are homologs to the Sir2 protein. SIRT3 is known to regulate the epigenetic gene silencing and suppresses recombination of rDNA (1). SIRT3 may function as an intracellular regulatory protein with mono-ADP-ribosyltransferase activity that is essential for its silencing function. SIRT3 regulates and maintains basal ATP levels in the cell (2). SIRT3 also modulates mitochondrial intermediary metabolism and fatty acid use during fasting (3).

References

1. Tanny, J. C. et.al: An enzymatic activity in the yeast Sir2 protein that is essential for gene silencing. *Cell* 99: 735-745, 1999.
2. Ahn, B.-H. et.al: A role for the mitochondrial deacetylase Sirt3 in regulating energy homeostasis. *Proc. Nat. Acad. Sci.* 105: 14447-14452, 2008.
3. Hirschey, M. D. et.al: SIRT3 regulates mitochondrial fatty-acid oxidation by reversible enzyme deacetylation. *Nature* 464: 121-125, 2010.

Sample Data



Western blot analysis of SIRT3 in mouse heart tissue lysate with SIRT3 antibody at (A) 1 and (B) 2 ug/ml.

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Purification

Affinity chromatography

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Storage & Shipping

Store product at -20°C. For optimal storage, aliquot antibody into smaller quantities after centrifugation and store at recommended temperature. For optimal performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on ice packs.

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: orders@signalchem.com
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