10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SIRT1 Antibody (monoclonal) (M03)

Mouse monoclonal antibody raised against a partial recombinant SIRT1.
Catalog # AT3890a

Product Information

Application	WB, E
Primary Accession	Q96EB6
Other Accession	BC012499
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	7C2
Calculated MW	81681

Additional Information

Gene ID	23411
Other Names	NAD-dependent protein deacetylase sirtuin-1, hSIRT1, 351-, Regulatory protein SIR2 homolog 1, SIR2-like protein 1, hSIR2, SirtT1 75 kDa fragment, 75SirT1, SIRT1, SIR2L1
Target/Specificity	SIRT1 (AAH12499, 456 a.a. ~ 555 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	SIRT1 Antibody (monoclonal) (M03) is for research use only and not for use in diagnostic or therapeutic procedures.

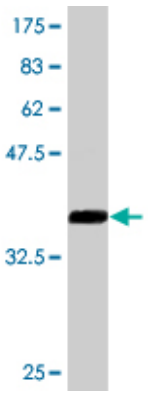
Background

This gene encodes a member of the sirtuin family of proteins, homologs to the yeast Sir2 protein. Members of the sirtuin family are characterized by a sirtuin core domain and grouped into four classes. The functions of human sirtuins have not yet been determined; however, yeast sirtuin proteins are known to regulate epigenetic gene silencing and suppress recombination of rDNA. Studies suggest that the human sirtuins may function as intracellular regulatory proteins with mono-ADP-ribosyltransferase activity. The protein encoded by this gene is included in class I of the sirtuin family. Alternative splicing results in multiple transcript variants.

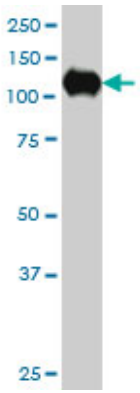
References

SIRT1 regulates UV-induced DNA repair through deacetylating XPA. Fan W, et al. Mol Cell, 2010 Jul 30. PMID 20670893.SIRT1 promotes the central adaptive response to diet restriction through activation of the dorsomedial and lateral nuclei of the hypothalamus. Satoh A, et al. J Neurosci, 2010 Jul 28. PMID 20668205.SIRT1 variants are associated with aging in a healthy Han Chinese population. Zhang WG, et al. Clin Chim Acta, 2010 Nov 11. PMID 20633545.Sirtuin 1 regulation of developmental genes during differentiation of stem cells. Calvanese V, et al. Proc Natl Acad Sci U S A, 2010 Aug 3. PMID 20631301.MicroRNA-34a regulation of endothelial senescence. Ito T, et al. Biochem Biophys Res Commun, 2010 Aug 6. PMID 20627091.

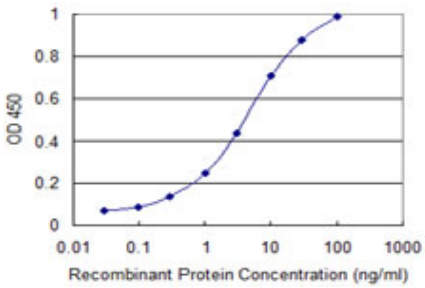
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.63 KDa) .



SIRT1 monoclonal antibody (M03), clone 7C2. Western Blot analysis of SIRT1 expression in Hela S3 NE ((Cat # AT3890a)



Detection limit for recombinant GST tagged SIRT1 is 0.1 ng/ml as a capture antibody.