Product Datasheet

SIRT1 (Ab-344) Antibody

Catalog No: #21705

Package Size: #21705-1 50ul #21705-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

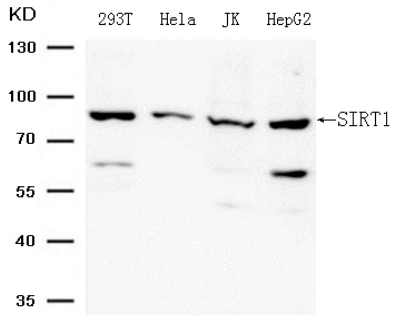
Description

Product Name	SIRT1 (Ab-344) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Applications	WB
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of total SIRT1 protein.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around aa.342~346 (N-Y-T-Q-N) derived from Human SIRT1.
Target Name	SIRT1
Other Names	SIR2L1
Accession No.	Swiss-Prot#:Q96EB6NCBI Protein#: NP_036370.2.
Uniprot	Q96EB6
GeneID	23411;
Target Species	Human
SDS-PAGE MW	82kd
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

Western blotting :1:500~1:1000

Images



Western blot analysis of extracts from 293T,Hela,JK and HepG2 cells using SIRT1 (Ab-344) Antibody #21705.

Background

NAD-dependent protein deacetylase that links transcriptional regulation directly to intracellular energetics and participates in the coordination of several separated cellular functions such as cell cycle, response to DNA damage, metobolism, apoptosis and autophagy. Can modulate chromatin function through deacetylation of histones and can promote alterations in the methylation of histones and DNA, leading to transcriptional repression. Deacetylates a broad range of transcription factors and coregulators, thereby regulating target gene expression positively and negatively. Serves as a sensor of the cytosolic ratio of NAD+/NADH which is altered by glucose deprivation and metabolic changes associated with caloric restriction. Is essential in skeletal muscle cell differentiation and in response to low nutrients mediates the inhibitory effect on skeletal myoblast differentiation which also involves 5'-AMP-activated protein kinase (AMPK) and nicotinamide phosphoribosyltransferase (NAMPT).

1)Vaziri H., Dessain S.K., Ng Eaton E., Imai S., Frye R.A., Pandita T.K., Guarente L., Weinberg R.A.Cell 107:149-159(2001)

2)Langley E., Pearson M., Faretta M., Bauer U.-M., Frye R.A., Minucci S., Pelicci P.G., Kouzarides T.EMBO J. 21:2383-2396(2002)

Note: This product is for in vitro research use only