

Product Name: KD-Validated Sirtuin 5 Mouse Monoclonal Antibody**Catalog #: KVA00519**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM,ICC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Mouse mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2,500; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 33.9kDa

Antigen Information

Gene Name	SIRT5
Alternative Names	SIRT5; Sirtuin 5; NAD-Dependent Protein Deacylase Sirtuin-5, Mitochondrial; SIR2L5; Sirtuin (Silent Mating Type Information Regulation 2 Homolog) 5 (S. Cerevisiae); Sirtuin (Silent Mating Type Information Regulation 2, S.Cerevisiae, Homolog) 5; NAD-Dependent Lysine Demalonylase And Desuccinylase Sirtuin-5, Mitochondrial; Silent Mating Type Information Regulation 2, S.Cerevisiae, Homolog 5; NAD-Dependent Deacetylase Sirtuin-5; Regulatory Protein SIR2 Homolog 5; SIR2-Like Protein 5; Sirtuin Type 5; Sir2-Like 5; EC 2.3.1.-
Gene ID	23408.0
SwissProt ID	Q9NXA8
Immunogen	Recombinant protein of human SIRT5

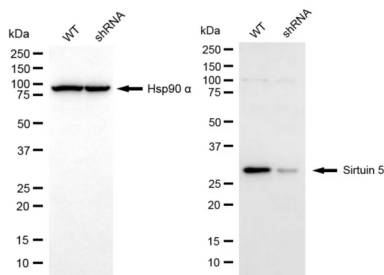
Background

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 III of the sirtuin family. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Jul 2010]

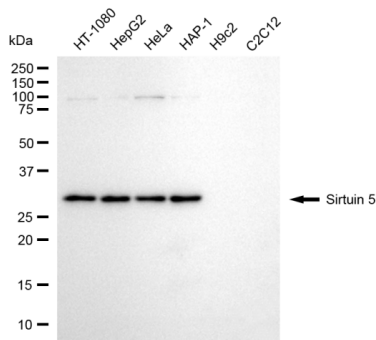
Research Area

Cardiovascular, Epigenetics and Nuclear Signaling

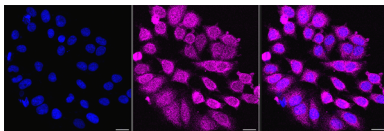
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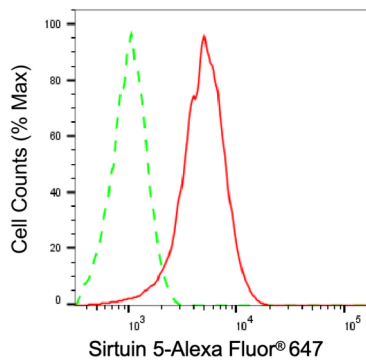
Western blotting analysis using sirtuin 5 antibody (KVA00519). Sirtuin 5 expression in wild-type (WT) and sirtuin 5 (SIRT5) shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with sirtuin 5 antibody (KVA00519, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Western blotting analysis using sirtuin 5 antibody (KVA00519). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with sirtuin 5 antibody (KVA00519, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Immunocytochemical staining of HepG2 cells with Sirtuin 5 antibody (KVA00519, 1:1,000). Nuclei were stained blue with DAPI; Sirtuin 5 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.



Flow cytometric analysis of Sirtuin 5 expression in HepG2 cells using Sirtuin 5 antibody (KVA00519, 1:2,000). Green, isotype control; red, Sirtuin 5.