For Research Use Only

SIRT2 Monoclonal antibody

Catalog Number:66410-1-Ig Featured Product 13 Publications

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
66410-1-Ig

Size:
150ul , Concentration: 1400 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG7756

GenBank Accession Number:
BC003547

GeneID (NCBI):
22933

UNIPROT ID:
Q8IXJ6

Full Name:
sirtuin (silent mating type information regulation 2 homolog) 2 (S. cerevisiae)

Calculated MW:
43 kDa

Observed MW:
37-45 kDa

Purification Method:
Protein G purification

CloneNo.:
1D8G10

Recommended Dilutions:
WB: 1:5000-1:50000
IHC: 1:50-1:500
IF/ICC: 1:50-1:500

Applications

Tested Applications:
WB, IHC, IF/ICC, ELISA

Cited Applications:
WB, IHC, IF, IP

Species Specificity:
human, mouse, rat, pig

Cited Species:
human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : LNCaP cells, fetal human brain tissue, pig heart tissue, pig brain tissue, rat heart tissue, rat brain tissue, mouse brain tissue, MCF-7 cells, HeLa cells, HEK-293 cells, Jurkat cells, K-562 cells

IHC : human kidney tissue, human heart tissue

IF/ICC : HepG2 cells,

Background Information

The silent information regulator(SIR2) family of genes is highly conserved from prokaryotes to eukaryotes and is involved in diverse processes, including transcriptional regulation, cell cycle progression, DNA damage repair, and aging. SIR2 contains a 323 amino acid catalytic core domain with a NAD-binding domain and a large groove which is the likely site of catalysis. SIR2 is widely expressed and highly expressed in the heart, brain, and skeletal muscle, while it is weakly expressed in the placenta and lungs. Down-regulated in many gliomas suggesting that it may act as a tumor suppressor gene in human gliomas possibly through the regulation of the microtubule network. SIRT2 exists in various isoforms and the molecular weight of isoforms are 35 kDa, 40 kDa, and 42 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Rui Lin	36082450	Prostate	WB
Scarlett Acklin	35875690	Neurooncol Adv	IHC
David Siegel	33360352	Redox Biol	WB

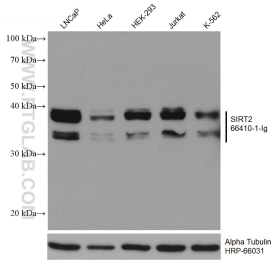
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

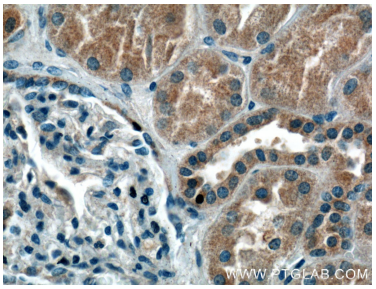
*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

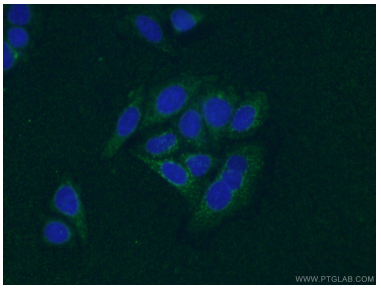
Selected Validation Data



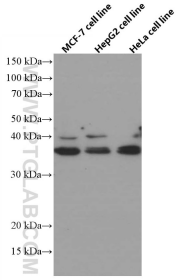
Various lysates were subjected to SDS PAGE followed by western blot with 66410-1-Ig (SIRT2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Alpha Tubulin Monoclonal antibody (HRP-66031) as loading control.



Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 66410-1-Ig (SIRT2 Antibody) at dilution of 1:200 (under 40x lens).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using 66410-1-Ig(SIRT2 antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated Goat Anti-Mouse IgG(H+L).



Various lysates were subjected to SDS PAGE followed by western blot with 66410-1-Ig (SIRT2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.