Anti-SIRT1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R014211

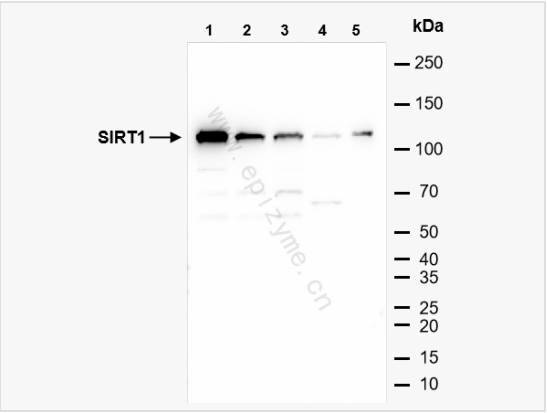
Product Information

Application	WB, IF (Cell)/ICC, ELISA
Reactivity	Human
Dilution	WB 1:1,000~1:2,000; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	32R67H94
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human SIRT1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-SIRT1 Rabbit mAb [32R67H94] is for research use only and not for use in diagnostic or therapeutic procedures.

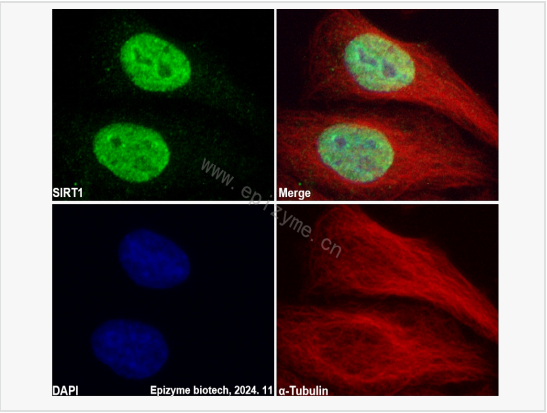
Protein Information

Synonyms	75SirT1, hSIR2, hSIRT1, HST2, HST2, S. cerevisiae, homolog of, NAD dependent deacetylase sirtuin 1, NAD dependent protein deacetylase sirtuin 1, NAD-dependent deacetylase sirtuin-1, OTTHUMP00000198111, OTTHUMP00000198112, Regulatory protein SIR2 homolog 1, SIR1_HUMAN, SIR2, SIR2 like 1, SIR2 like protein 1, SIR2, S.cerevisiae, homolog-like 1, SIR2-like protein 1, SIR2ALPHA, SIR2L1, Sirt1, SirtT1 75 kDa fragment, Sirtuin (silent mating type information regulation 2 homolog) 1 (S. cerevisiae), Sirtuin 1, Sirtuin type 1.
Calculated MW	Calculated MW: 82 kDa; Observed MW: 110 kDa
Uniprot ID	Q96EB6
Gene ID	23411
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.
Cellular Location	Cytoplasm. Mitochondrion and Nucleus, PML body. Cytoplasm. Nucleus. Recruited to the nuclear bodies via its interaction with PML (PubMed:12006491). Colocalized with APEX1 in the nucleus (PubMed:19934257). May be found in nucleolus, nuclear euchromatin, heterochromatin and inner membrane (PubMed:15469825). Shuttles between nucleus and cytoplasm (By similarity). Colocalizes in the nucleus with XBP1 isoform 2 (PubMed:20955178).
Tissue Location	Widely expressed.

Validation Images



Western Blot - Anti-SIRT1 Rabbit mAb [32R67H94]
All lanes: R014211 at 1:1,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates
Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates
Lane 4: A431 (Human epidermoid teratoma cell line) whole cell lysates
Lane 5: T24 (Human bladder cancer epithelial cell) whole cell lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 82 kDa
Observed band size: 110 kDa
Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-SIRT1 Rabbit mAb [32R67H94]
Sample: HeLa cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibodies: R014211 at 1:100 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution
Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).