

Anti-SIRT1 Rabbit pAb

Purified Rabbit Polyclonal Antibody

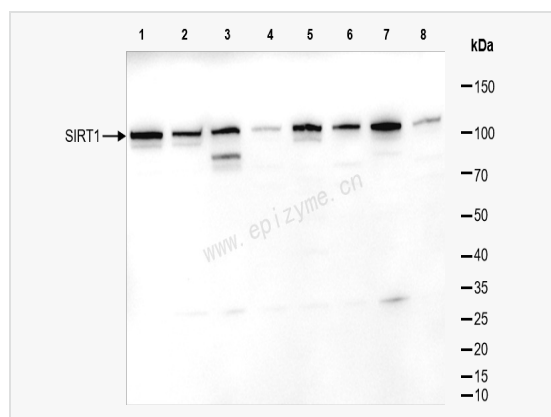
Catalog # P011202

Product Information

Application	WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Polyclonal
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 pAb 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.



Western Blot - Anti-SIRT1 Rabbit pAb

All lanes: P011202 at 1:1,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysates

Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates

Lane 4: U2OS (Human osteosarcoma epithelial cell) whole cell lysates

Lane 5: MCF7 (Human breast cancer epithelial cell) whole cell lysates

Lane 6: Jurkat (Human T lymphocytic leukemia cell) whole cell lysates

Lane 7: 293T (Human embryonic kidney cell) whole cell lysates

Lane 8: C2C12 (Mouse myoblast cell lines) whole cell lysates

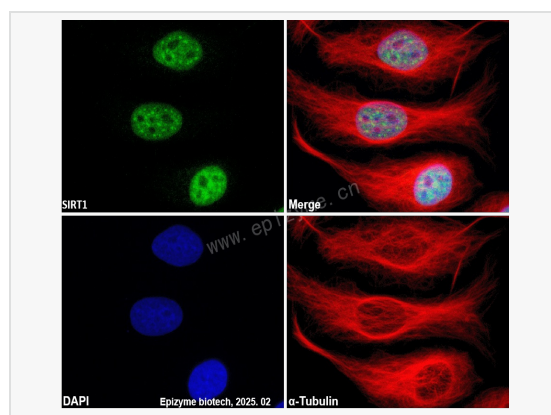
Lysates/proteins at 10 µg per lane.

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 pAb

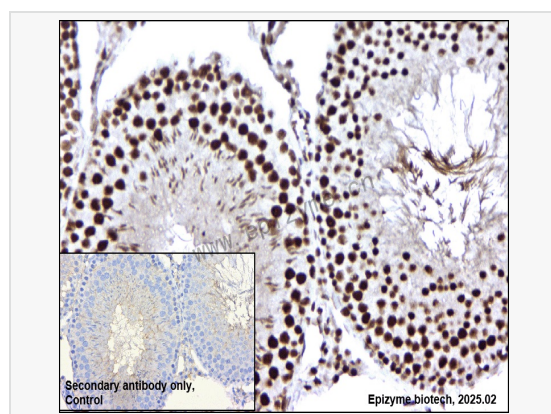
Sample: HeLa cells

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: P011202 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).



Immunohistochemistry - Anti-SIRT1 Rabbit pAb

Sample: Paraformaldehyde-fixed, paraffin embedded rat testis tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: P011202 at 1:100 dilution

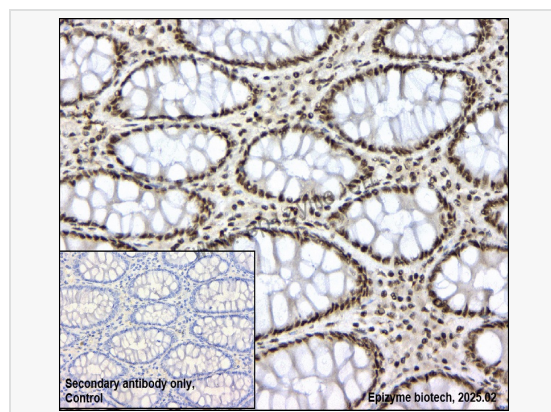
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-SIRT1 Rabbit pAb

Sample: Paraformaldehyde-fixed, paraffin embedded human colonic cancer tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: P011202 at 1:100 dilution

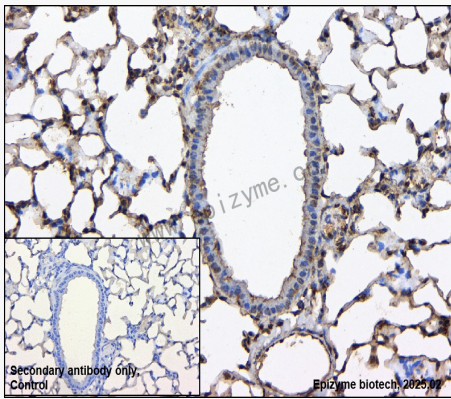
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-SIRT1 Rabbit pAb

Sample: Paraformaldehyde-fixed, paraffin embedded mouse lung tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: P011202 at 1:100 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.