

## [KO Validated] Anti-SIRT1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

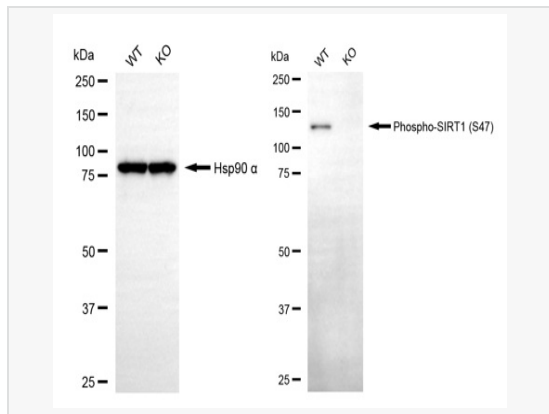
Catalog # R020041

### Product Information

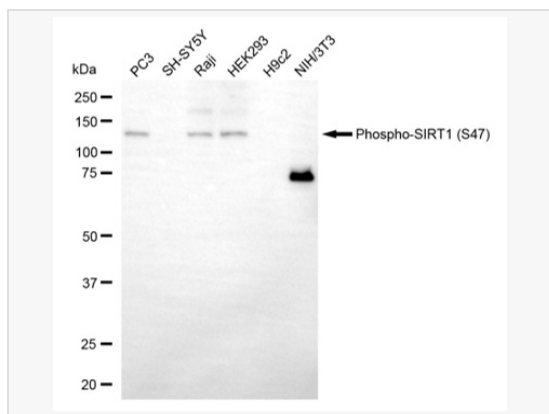
Application	WB
Reactivity	Human
Dilution	WB 1:1,000~1:5,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	60N24J14
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Phospho-SIRT1 (S47)
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KO Validated] Anti-SIRT1 Rabbit mAb [60N24J14] is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

Synonyms	SIRT1; Sirtuin; SIR2L1; NAD-Dependent Protein Deacetylase Sirtuin-1; NAD-Dependent Protein Deacetylase Sirtuin-1; Regulatory Protein SIR2 Homolog 1; SIR2-Like Protein 1; Sirtuin (Silent Mating Type Information Regulation 2, <i>S. Cerevisiae</i> , Homolog); Sirtuin (Silent Mating Type Information Regulation 2 Homolog) 1 ( <i>S. Cerevisiae</i> ); Sirtuin Type 1; EC 2.3.1.286; EC 2.3.1.-; SIR2alpha; HSIRT1; HSIR2; SIR2.
Calculated MW	Calculated MW: 82 kDa; Observed MW: 120 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 blotting analysis using phospho-SIRT1 (S47) antibody (R020041). Phospho-SIRT1 (S47) expression in wild-type (WT) and SIRT1 knockout (KO) HeLa cells with 30  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with phospho-SIRT1 (S47) antibody (R020041, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using phospho-SIRT1 (S47) antibody (R020041). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with phospho-SIRT1 (S47) antibody (R020041, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.