

Basic Information

Product Name	Anti-SIRT1 (Phospho-S47) Antibody	
Gene Name	SIRT1	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, IHC, ICC/IF	
Contents	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.	
Immunogen	A synthesized peptide derived from human Phospho-SIRT1 (S47)	
concentration	500 ug/ml	
Purification	Affinity-chromatography	
Observed MW	110-120KD	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:20-100 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:20-100	

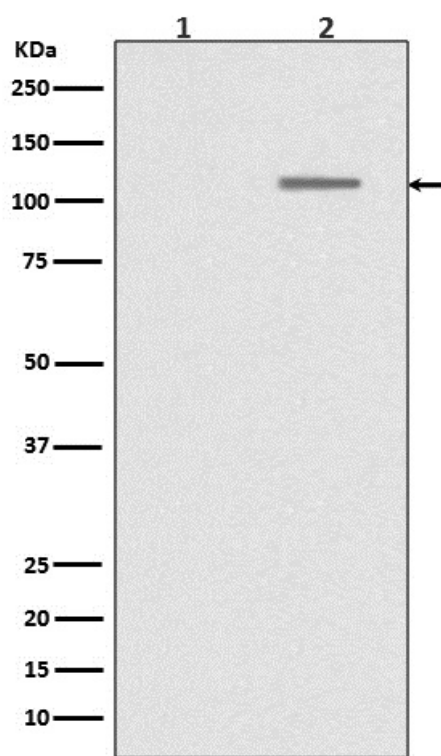
Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

Sirtuin 1, also known as SIR2L1 or SIRT1, is a protein that in humans is encoded by the SIRT1 gene. It is mapped to 10q21.3. Sirtuin 1 is a member of the sirtuin family of proteins, homologs of the Sir2 gene in *S. cerevisiae*. Members of the sirtuin family are characterized by a sirtuin core domain and grouped into four classes. Sirtuin 1 is downregulated in cells that have high insulin resistance and inducing its expression increases insulin sensitivity, suggesting the molecule is associated with improving insulin sensitivity. Furthermore, Sirtuin 1 was shown to de-acetylate and affect the activity of both members of the PGC1- α /ERR- α complex, which are essential metabolic regulatory transcription factors.

Selected Validation Data



Western blot analysis of Phospho-SIRT1 (S47) expression in (1) HEK293 cell lysate; (2) HEK293 cell lysate treated with LP.