

Basic Information

Product Name	Anti-SIRT1 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 SIRT1 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.		
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		

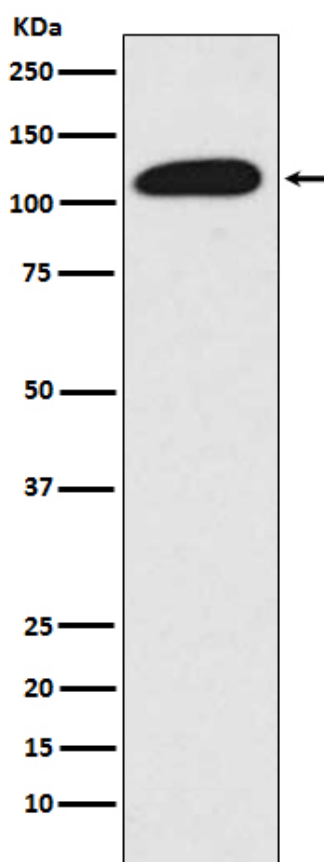
Storage

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 Sir2/SIRT1 expression in Jurkat cell lysate.