

## Basic Information

|                           |                                                                                                              |
|---------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>Product Name</b>       | Anti-SIRT1 (Phospho-T530) Antibody                                                                           |
| <b>Gene Name</b>          | SIRT1                                                                                                        |
| <b>Source</b>             | Rabbit                                                                                                       |
| <b>Isotype</b>            | IgG                                                                                                          |
| <b>Species Reactivity</b> | human                                                                                                        |
| <b>Tested Application</b> | WB                                                                                                           |
| <b>Contents</b>           | 500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. |
| <b>Immunogen</b>          | A synthesized peptide derived from human SIRT1                                                               |
| <b>concentration</b>      | 500 ug/ml                                                                                                    |
| <b>Purification</b>       | Affinity-chromatography                                                                                      |
| <b>Observed MW</b>        | 110-120KD                                                                                                    |
| <b>Dilution Ratios</b>    | Western blot (WB):1:500-2000                                                                                 |

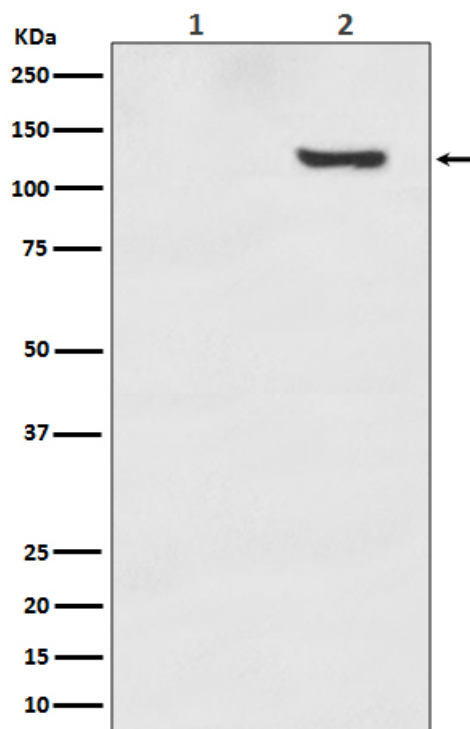
## Storage

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- $\alpha$ /ERR- $\alpha$  complex, which are essential metabolic regulatory transcription factors.

## Selected Validation Data



Western blot analysis of Phospho-SIRT1 (T530) expression in (1) 293T cell lysate; (2) 293T cell treated with Calyculin A.