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SIRT1 (193-747 aa) (GST-tagged), Human recombinant protein

NAD-dependent Deacetylase 1, SIR2L1, SIR2-like Protein 1, Sirtuin 1, Silent Information Regulator 2

Catalog # PBV10889r

Specification

SIRT1 (193-747 aa) (GST-tagged), Human recombinant protein - Product info

Primary Accession	Q96EB6
Calculated MW	**82.9 kDa KDa**

SIRT1 (193-747 aa) (GST-tagged), Human recombinant protein - Additional Info

Gene ID	**23411**
Gene Symbol	**SIRT1**

Other Names
NAD-dependent Deacetylase 1, SIR2L1, SIR2-like Protein 1, Sirtuin 1, Silent Information Regulator 2

Gene Source	**Human**
Source	**E. coli**
Assay&Purity	**SDS-PAGE; ≥60%**
Assay2&Purity2	**N/A;**
Recombinant	**Yes**
Results	**≥ 550 pmol/min/mg**

Target/Specificity
SIRT1

Format
Liquid

Storage
-80°C; Supplied as a solution in 50 mM sodium phosphate, pH 7.2, containing 100 mM sodium chloride and 20% glycerol

SIRT1 (193-747 aa) (GST-tagged), Human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SIRT1 (193-747 aa) (GST-tagged), Human recombinant protein - Images

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SIRT1 (193-747 aa) (GST-tagged), Human recombinant protein - Background

The sirtuins represent a distinct class of trichostatin A-insensitive lysyl-deacetylases (class III HDACs) and have been shown to catalyze a reaction that couples lysine deacetylation to the formation of nicotinamide and O-acetyl-ADP-ribose from NAD+ and the abstracted acetyl group. There are seven human sirtuins, which have been designated SIRT1-7. SIRT1, which is located in the nucleus, is the human sirtuin with the greatest homology to yeast Sir2 (Silent information regulator 2) and has been shown to regulate the activity of the p53 tumor suppressor and inhibit apoptosis. These results have significant implications regarding an important role of SIRT1 in modulating the sensitivity of cells in the p53-dependent apoptotic response and the possible effect in cancer therapy. Since the growth suppressive function of p53 is strongly enhanced by DNA damaging reagents, it is expected that inhibitors of SIRT1 may be effective anti-cancer drugs.

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Vaziri H.,et al.Cell 107:149-159(2001).
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