

**SIRT4 (GST-tagged), Human recombinant protein**  
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**Catalog # PBV11249r****Specification**

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**SIRT4 (GST-tagged), Human recombinant protein - Product info**

Primary Accession [Q9Y6E7](#)  
Calculated MW **61.9 kDa (NT GST Tag) KDa**

**SIRT4 (GST-tagged), Human recombinant protein - Additional Info**

Gene ID **23409**  
Gene Symbol **SIRT4**  
**Other Names**  
SIR2-like Protein 4; NAD-dependent ADP-ribosyltransferase Sirtuin 4; SIR2L4; Silent Information Regulator 4; Sirtuin 4

Gene Source **Human**  
Source **E. coli**  
Assay&Purity **SDS-PAGE; ≥95%**  
Assay2&Purity2 **HPLC;**  
Recombinant **Yes**  
**Target/Specificity**  
SIRT4

**Format**  
Liquid

**Storage**  
-80°C; 50 mM sodium phosphate, pH 7.2, 100 mM sodium chloride, 2.5 mM DTT, 20% glycerol.

**SIRT4 (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 Cytometry](#)
- [Cell Culture](#)

**SIRT4 (GST-tagged), Human recombinant protein - Images****SIRT4 (GST-tagged), Human recombinant protein - Background**

There are seven human sirtuins, also known as class III HDACs, which have been designated SIRT1

to SIRT7. Each is involved in various post-translational modifications by utilizing NAD dependent deacetylase and ADP-ribosyltransferase activities. SIRT4 is a mitochondrial ADP-ribosyltransferase responsible for the transfer of ADP-ribose from NAD to specific substrates such as glutamate dehydrogenase (GDH). In caloric-sufficient conditions, SIRT4 ADP-ribosylates GDH, repressing its activity and correspondingly decreasing insulin secretion. There is some uncertainty about the relevance of sirtuin ribosyl transferase activity due to its very slow rate, which is about 500 times lower than the corresponding deacetylation reaction (for those that have been characterized). SIRT4 is found in many tissues, but is specifically enriched in the kidney, heart, brain, and liver.

#### **SIRT4 (GST-tagged), Human recombinant protein - References**

Frye R.A.,et al.Biochem. Biophys. Res. Commun. 260:273-279(1999).  
Scherer S.E.,et al.Nature 440:346-351(2006).  
Haigis M.C.,et al.Cell 126:941-954(2006).  
Ahuja N.,et al.J. Biol. Chem. 282:33583-33592(2007).  
Michishita E.,et al.Mol. Biol. Cell 16:4623-4635(2005).