

SIRT5 (GST-tagged), Human recombinant protein
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Catalog # PBV11250r**Specification**

SIRT5 (GST-tagged), Human recombinant protein - Product info

Primary Accession [Q9NXA8](#)
Calculated MW **60.6 kDa (NT GST Tag), 26 kDa (native)**
KDa

SIRT5 (GST-tagged), Human recombinant protein - Additional Info

Gene ID **23408**
Gene Symbol **SIRT5**
Other Names
NAD-dependent Deacetylase 5; SIR2-like Protein 5; SIR2L5; Sirtuin 5; Silent Information Regulator 5

Gene Source **Human**
Source **E. coli**
Assay&Purity **SDS-PAGE; ≥90%**
Assay2&Purity2 **HPLC;**
Recombinant **Yes**
Target/Specificity
SIRT5

Format
Liquid

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

SIRT5 (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](#)

SIRT5 (GST-tagged), Human recombinant protein - Images**SIRT5 (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. SIRT5 is located in the mitochondrial matrix and its functions are largely still being elucidated, however a few promising substrates have been studied. SIRT5 has been shown to deacetylate carbamoyl phosphate synthetase 1 (CSP1), activating the enzyme to catalyze the first step of the urea cycle. CSP1 is important in the detoxification of excess ammonia that can accumulate during fasting. Cytochrome C, another mitochondrial enzyme involved in oxidative metabolism can also be deacetylated by SIRT5. SIRT5 is predominantly found in the heart, brain, testis, and lymphoblasts.

SIRT5 (GST-tagged), Human recombinant protein - References

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Ota T., et al. Nat. Genet. 36:40-45(2004).
Bechtel S., et al. BMC Genomics 8:399-399(2007).
Mungall A.J., et al. Nature 425:805-811(2003).
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