

Rat SIRT3 protein, His tag

Cat. No. GTX00061-pro

Application	Functional Assay
Species	Rat

Package
10 µg

APPLICATION

Application Note

Sirtuin 3 (SIRT3), the NAD-dependent deacetylase is a member of the mammalian sirtuin family of proteins. In human, sirtuins have a range of molecular functions and have emerged as important proteins in aging, stress resistance and metabolic regulation. It also can regulate epigenetic gene silencing and suppress recombination of rDNA in yeast. SIRT3 expression in white and brown adipose tissue. Besides, Isocitrate Dehydrogenase 2, mitochondrial (IDH2) has been identified as an interactor of SIRT3, thus a binding ELISA assay was conducted to detect the interaction of recombinant rat SIRT3 and recombinant rat IDH2. Briefly, SIRT3 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to IDH2-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-SIRT3 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of SIRT3 and IDH2 was in a dose dependent manner.

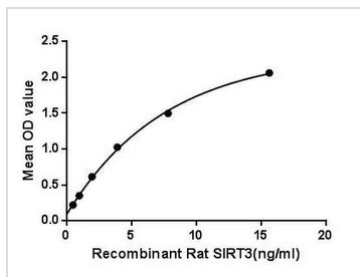
Observed MW 22 kDa.

PROPERTIES

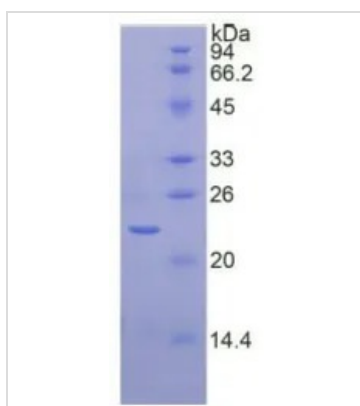
Form	Lyophilized powder
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.
Preservative	ProClin 300
Storage	For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.
Region/Sequence	N-terminal His-Tag; Pro127~Glu303
Expression System	E. coli
Purity	> 95%
Endotoxin	< 1 EU/µg
Conjugation	Unconjugated
Note	For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.



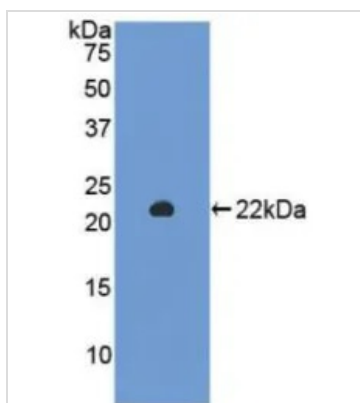
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DATA IMAGES

GTX00061-pro Functional Assay Image

Functional ELISA analysis of GTX00061-pro Rat SIRT3 protein which can bind immobilized IDH2 protein.


GTX00061-pro Image

SDS-PAGE analysis of GTX00061-pro Rat SIRT3 protein.


GTX00061-pro Image

WB analysis of GTX00061-pro Rat SIRT3 protein.



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