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## Product Datasheet

### Rat SIRT3 protein, His tag, Unconjugated GTX00061-PRO

Article Name	Rat SIRT3 protein, His tag, Unconjugated
Biozol Catalog Number	GTX00061-PRO
Supplier Catalog Number	GTX00061-pro
Alternative Catalog Number	GTX00061-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA
Species Reactivity	Rat
Conjugation	Unconjugated
NCBI	<a href="#">293615</a>
UniProt	<a href="#">C6ZII9</a>
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, ProClin 300.
Expression System	E. coli
Form	Lyophilized powder
Sequence	N-terminal His-Tag, Pro127~Glu303

#### Application Notes

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 37C. 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 37C. 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.