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Product Datasheet

Mouse SOD3 protein, His tag, Unconjugated GTX00423-PRO

Article Name	Mouse SOD3 protein, His tag, Unconjugated
Biozol Catalog Number	GTX00423-PRO
Supplier Catalog Number	GTX00423-pro
Alternative Catalog Number	GTX00423-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA
Species Reactivity	Mouse
Conjugation	Unconjugated
NCBI	20657
UniProt	O09164
Buffer	Reconstitute with 20mM Tris (pH8.0) and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris (pH8.0), 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, Ser25~Thr251 (NP_035565.1)

Application Notes

Extracellular superoxide dismutase [Cu-Zn] is an enzyme that in humans is encoded by the SOD3 gene. This gene encodes a member of the superoxide dismutase (SOD) protein family. SODs are antioxidant enzymes that catalyze the dismutation of two superoxide radicals into hydrogen peroxide and oxygen. According to the report, in a weakly alkaline buffer solution (pH 8.2) with N-tris (hydroxymethyl) amino methane-HCL, pyrogallol can occur autoxidation in the air, then SOD can inhibit this reaction. Thus, using this way to measure the activity of recombinant mouse SOD3. The reaction was performed in adding 30 μ l pyrogallol (50 mmol/l) to 900 μ l Tris-HCl (50 mmol/l) in 1.5ml cuvette (1.0cm light path), rapidly mixing at 25C, then read at 325nm (zero the spectrophotometer using 50 mmol/l Tris-HCl), record the OD value every 30 second for 6 times. Control the pyrogallol autoxidation rate at 0.70 OD/min. After, adding various concentrations of recombinant of SOD3 to 900 μ l Tris-HCl (50 mmol/l), incubated for 20min at 25C, then adding 30 μ l (50 mmol/l) pyrogallol to each tube, rapidly mixing and read at 325nm, record the OD value every 30 second for 6 times. Under these conditions, the enzyme amount of 50% per minute inhibition of pyrogallol autoxidation is defined as a unit. The specific activity of recombinant mouse SOD3 is 273.8 U/mg.