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Product Datasheet

Human SOD3 protein, His tag, Unconjugated GTX00425-PRO

Article Name	Human SOD3 protein, His tag, Unconjugated
Biozol Catalog Number	GTX00425-PRO
Supplier Catalog Number	GTX00425-pro
Alternative Catalog Number	GTX00425-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA
Species Reactivity	Human
Conjugation	Unconjugated
NCBI	6649
UniProt	P08294
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, Trp19~Ala240 (NP_003093.2)

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, we use this way to measure the activity of recombinant human SOD3. The reaction was performed in adding 30 μl pyrogallol (50mmol/l) to 900 μl Tris-HCl (50mmol/l) in 1.5ml cuvette (1.0cm light path), rapidly mixing at 25C, then read at 325nm (zero the spectrophotometer using 50mmol/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 μl Tris-HCl (50mmol/l), incubated for 20min at 25C, then adding 30 μl pyrogallol (50mmol/l) 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 human SOD3 is 121.4 U/mg.
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