

Active Recombinant Mouse SOD3 protein, His-tagged

Cat. No. SOD3-3374M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Mouse SOD3 protein(O09164)(25~251 aa), fused with N-terminal His tag, was expressed in HEK293.
Species	Mouse
Source	HEK293
ProteinLength	25-251 aa
Form	Lyophilized from sterile PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Bio-activity	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 mouse SOD3. The reaction was performed in adding 5 µl 5 mmol/L pyrogallol to 200µl 50mmol/L Tris-HCl, rapidly mixing at 25°C, then read at 325 nm (using 50mmol/L Tris-HCl as blank control) in kinetic mode for 3 minutes using a microplate reader controlling the pyrogallol autoxidation rate at 0.70 OD/min. Different concentrations of recombinant mouse SOD3 were added into 200 µl 50 mmol/L Tris-HCl, incubated for 20min at

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25°C, then adding 5µl 5mmol/L pyrogallol to each well, rapidly mixing and read at 325 nm in kinetic mode for 3 minutes. Under these conditions, the enzyme amount of 50% inhibition of pyrogallol autooxidation per minute is defined as a unit. The specific activity of recombinant mouse SOD3 is 127.3 U/mg.

Molecular Mass	26.5kDa
Endotoxin	<1.0EU per 1µg (determined by the LAL method).
Purity	> 90% as determined by SDS-PAGE.
Storage	Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

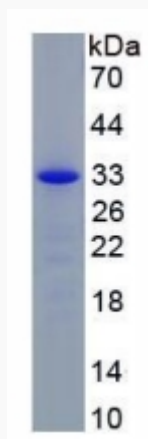
Gene Name	Sod3 superoxide dismutase 3, extracellular [<i>Mus musculus</i>]
Official Symbol	SOD3
Synonyms	SOD3; superoxide dismutase 3, extracellular; extracellular superoxide dismutase [Cu-Zn]; extracellular superoxide dismutase; EC-SOD; AI314465; MGC13799;
Gene ID	20657
mRNA Refseq	NM_011435
Protein Refseq	NP_035565

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SDS-PAGE



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