

Active Recombinant Rabbit SOD3 protein, His-tagged

Cat. No. SOD3-7121R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Rabbit SOD3 protein(P41975)(25~166 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Rabbit
Source	E.coli
ProteinLength	25-166 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 rabbit SOD3. The reaction was performed in adding 8 µl 5 mmol/L pyrogallol to 200 µl 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 rabbit SOD3 were added into 200 µl 50 mmol/L Tris-HCl, incubated for 20 min at

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25°C, then adding 8 µl 5 mmol/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 rabbit SOD3 is 133.9 U/mg.

Molecular Mass	19.1kDa
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>Oryctolagus cuniculus</i>]
Official Symbol	SOD3
Synonyms	SOD3; superoxide dismutase 3, extracellular; extracellular superoxide dismutase [Cu-Zn]; EC-SOD; Extracellular superoxide dismutase;
Gene ID	100009320
mRNA Refseq	NM_001082632
Protein Refseq	NP_001076101

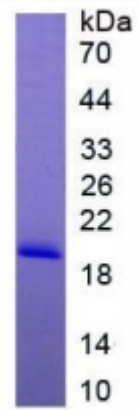
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SDS-PAGE



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