# Active Recombinant Mouse Sod3 protein, His-tagged

**Cat. No.** Sod3-777M **Lot. No.** (See product label)

## SPECIFICATION

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| **Product Overview** | Active Recombinant Mouse Sod3 protein(O09164)(25~251 aa), fused with N-terminal His tag, was expressed in E.coli. |
| **Species** | Mouse |
| **Source** | E.coli |
| **ProteinLength** | 25-251 aa |
| **Form** | Lyophilized from sterile 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 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 30μL 50mmol/L pyrogallol to 900μL 50mmol/L Tris-HCl in 1.5mL cuvette (1.0cm light path), rapidly mixing at 25°C,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 900μL 50mmol/L Tris-HCl, |

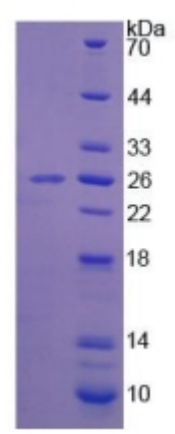
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| | incubated for 20min at 25°C, then adding 30μL 50mmol/L pyrogallol to each tube, rapidly mixing and read at 325nm, record the OD value every 30 second for 6 times. Under these conditions, the enzyme amount of 50% per minute inhibition of pyrogallol autooxidation is defined as a unit. |
| **Molecular Mass** | 26.2kDa |
| **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 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex. |

## GENE INFORMATION

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| **Gene Name** | Sod3 superoxide dismutase 3, extracellular [ Mus musculus ] |
| **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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