



# Recombinant Rat Superoxide dismutase [Cu-Zn] (Sod1)

<b>Product Code</b>	CSB-BP022397RA
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P07632
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Rattus norvegicus (Rat)
<b>Purity</b>	≥85% (SDS-PAGE)
<b>Sequence</b>	AMKAVCVLK GDGPVQGVIIH FEQKASGEPV VVSGQITGLT EGEHGFHVHQ YGDNTQGCTT AGPHFNPHSK KHGGPADEER HVGDLGNVAA GKDGVANVSI EDRVISLSGE HSIIGRTMVV HEKQDDLKKG GNEESTKTGN AGSRLACGVI GIAQ
<b>Source</b>	Baculovirus
<b>Target Names</b>	Sod1
<b>Protein Names</b>	Recommended name: Superoxide dismutase [Cu-Zn] EC= 1.15.1.1
<b>Expression Region</b>	2-154
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	This protein binds copper and zinc ions and is one of two isozymes responsible for destroying free superoxide radicals in the body. The encoded isozyme is a soluble cytoplasmic protein, acting as a homodimer to convert naturally-occurring but harmful superoxide radicals to molecular oxygen and hydrogen peroxide. The other isozyme is a mitochondrial protein. Mutations in this gene have been implicated as causes of familial amyotrophic lateral sclerosis. Rare transcript variants have been reported for this gene.
<b>Reconstitution</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.
<b>Shelf Life</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.