Recombinant Protein Technical Manual

Recombinant Human SOD1/Superoxide Dismutase 1 Protein (His Tag)

RPES0249

Product Data:

Product SKU: RPES0249

Size: 50µg

Species: Human

Expression host: E. coli

Uniprot: NP_000445.1

Protein Information:

Molecular Mass:	16.8 kDa
AP Molecular Mass:	20 kDa
Tag:	N-His
Bio-activity:	
Purity:	> 97 % as determined by reducing SDS-PAGE.
Endotoxin:	Please contact us for more information.
Storage:	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 8.0
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Superoxide Dismutase [Cu-Zn]; Superoxide Dismutase 1; hSod1;ALS;ALS1;HEL-S-44;homodimer;hSod1;IPOA

Immunogen Information:

Sequence: Ala 2-Gln 154

Background:

SOD1 belongs to the Cu-Zn superoxide dismutase family. It 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-occuring 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. SOD1 destroys radicals which are normally produced within the cells and which are toxic to biological systems. Defects in SOD1 are the cause of amyotrophic lateral sclerosis type 1 (ALS1). ALS1 is a familial form of amyotrophic lateral sclerosis, a neurodegenerative disorder affecting upper and lower motor neurons and resulting in fatal paralysis. Sensory abnormalities are absent. Death usually occurs within 2 to 5 years. The etiology of amyotrophic lateral sclerosis is likely to be multifactorial, involving both genetic and environmental factors. The disease is inherited in 50% of cases leading to familial forms.