



## Recombinant Human Mn-Superoxide Dismutase (rh-Mn-SOD)

Product Name: Recombinant human copper, zinc-superoxide dismutase (rh-Mn-SOD)

Alternative Name: Superoxide dismutase 12(SOD2)

Catalog Number:

Packing details: 1 mg, 10 mg, 100 mg, 500 mg

Formulation: Lyophilized from sterile water

Mol. Wt.: The recombinant human SOD2 consisting of 199 amino acids and has a calculated molecular mass of 22.3 kDa. It migrates as an 25 kDa band in SDS-PAGE under reducing conditions.

Resources: Escherichia coli (E. coli)

Purity:  $\geq 95\%$  by SDS-PAGE analysis

Endotoxin :  $<1.0$  EU/ $\mu$ g protein

Storage condition:  $-20^{\circ}\text{C}$  in dark place

Storage duration: 3 years

Description: Superoxide dismutase [Mn], mitochondrial (SOD2), a member of the iron/manganese superoxide dismutase family, can form a homotetramer and bind one manganese ion per subunit. The expression of SOD2 is regulated by KRIT1. Mutations in SOD2 gene have been associated with idiopathic cardiomyopathy (IDC), sporadic motor neuron disease, and cancer. Furthermore, Mn-SOD (SOD2) activity is essential to achieve optimal training-induced protection against both ischemia/reperfusion(IR)-induced cardiac arrhythmias and infarction.

### Notes:

It is recommended that the product is reconstituted with sterile water into a final concentration of 1 mg/ml (10 KU/ml). Store the reconstituted product in aliquots at  $-20^{\circ}\text{C}$  in dark place. Avoid multiple freeze-thaw cycles and exposure to frequent temperature changes.

The use of strong acids and alkalis, strong oxidants, and high concentrations of organic solvents should be avoided to protect the product from denaturation.