Recombinant Human SOD2/Mn-SOD Protein (His Tag)

Catalog Number: PKSH033072

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Human
Source	E.coli-derived Human SOD2; Mn-SOD protein Lys25-Lys222, with an N-terminal His
Calculated MW	23.7 kDa
Observed MW	25 kDa
Accession	P04179
Bio-activity	Not validated for activity
Properties	
Purity	> 95 % as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at $<$ -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/ge
	packs. Upon receipt, store it immediately at $< -20^{\circ}$ C.
Formulation	Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 100mM NaCl, 50% Glycerol
	pH 8.0.
Data	
	KDa MK R 120 90 60 40 30 20

> 95 % as determined by reducing SDS-PAGE.

14

Background

Superoxide Dismutase (SOD2) is a number of the iron/manganese superoxide dismutase family. SOD2 is a mitochondrial protein that forms a homotetramer and binds one manganese ion per subunit. The SOD2 protein transforms toxic superoxide and a byproduct of the mitochondrial electron transport chain into hydrogen peroxide and diatomic oxygen. Genetic variation in SOD2 is associated with microvascular complications of diabetes type 6 (MVCD6); idiopathic cardiomyopathy (IDC); sporadic motor neuron disease; and cancer. SOD2 destroys superoxide anion radicals which are usually produced within the cells and which are toxic to biological systems.