

Recombinant Protein Technical Manual Recombinant Human SOD2/Mn-SOD Protein (His Tag) RPES0098

Product Data:

Product SKU: RPES0098 Size: 10μg

Species: Human Expression host: E. coli

Uniprot: P04179

Protein Information:

Molecular Mass: 23.7 kDa

AP Molecular Mass: 23 kDa

Tag: N-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ 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/gel packs. Upon receipt, store it immediately at<-20°C.

Formulation: Supplied as a 0.2 μm filtered solution of 20mM Tris,100mM NaCl,50% glycerol,pH

8.0.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Superoxide Dismutase [Mn] Mitochondrial; SOD2

Immunogen Information:

Sequence: Lys25-Lys222

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.