

## Recombinant Protein Technical Manual

# **Recombinant Human SOD2/Mn-SOD Protein (His** Tag, Human Cells)

RPES5248

**Product SKU: RPES5248** Size: 10µg

**Expression host:** Human Cells **Species**: Human

**Uniprot:** P04179

**Molecular Mass:** 23.2 kDa

AP Molecular Mass: 25 kDa

Tag: C-6His

**Bio-activity:** 

> 90 % as determined by reducing SDS-PAGE. **Purity:** 

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles. Storage:

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,150mM NaCl,pH8.0.

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) belongs to the iron/manganese superoxide dismutase family. SOD2 is a mitochondrial matrix protein that forms a homotetramer and binds one manganese ion per subunit. SOD2 transforms toxic superoxide, a byproduct of the mitochondrial electron transport chain into hydrogen peroxide and diatomic oxygen. It is reported that oxidative stress plays an essential role in the development of breast cancer, while SOD2 is one of the primary enzymes that directly convert potential harmful oxidizing species to harmless metabolites.