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

Catalog Number: PKSH033071

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

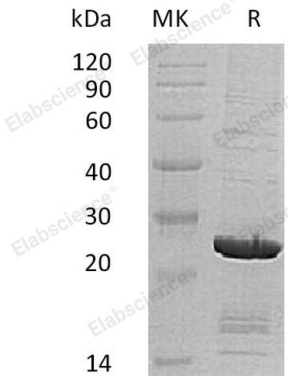
Description

Species	Human
Source	HEK293 Cells-derived Human SOD2;Mn-SOD protein Lys25-Lys222, with an C-terminal His
Mol_Mass	23.2 kDa
Accession	P04179
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
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/gel packs. Upon receipt, store it immediately at < - 20°C.
Formulation	Supplied as a 0.2 μm filtered solution of 20mM Tris-HCl, 150mM NaCl, pH 8.0.
Reconstitution	Not Applicable

Data



> 95 % as determined by reducing SDS-PAGE.

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.