

Synonym

SOD2,IPOB,MNSOD

Source

Human SOD2, His Tag (SO2-H5126) is expressed from E.coli cells. It contains AA Lys 25 - Lys 222 (Accession # AAH12423).

Predicted N-terminus: Met

Molecular Characterization

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 23.2 kDa. The protein migrates as 27 kDa under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

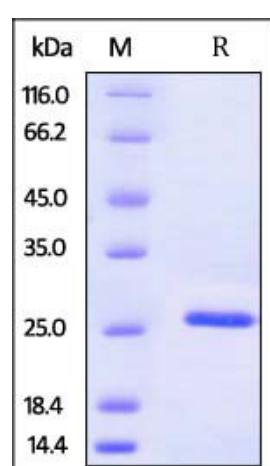
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

No activity loss was observed after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

Human SOD2, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Background

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.

References

Human SOD2 / Mn-SOD Protein, His Tag

Catalog # SO2-H5126



- (1) [Choudhary C., et al., 2009, Science 325:834-840.](#)
- (2) [Borgstahl G.E.O., et al., 1996, Biochemistry 35:4287-4297.](#)
- (3) [Hearn A.S., et al., 2001, Biochemistry 40:12051-12058.](#)

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.