Human SOD2 / Mn-SOD Protein

Catalog Number: 12656-HNAE

General Information

Gene Name Synonym:

IPOB; MNSOD; MVCD6

Protein Construction:

A DNA sequence encoding the mature form of human SOD2 (P04179-1) (Lys 25-Lys 222) was expressed and purified, with an initial Met.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 97 % as determined by SDS-PAGE

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Met

Molecular Mass:

The recombinant human SOD2 consisting of 199 amino acids and has a calculated molecular mass of 22.3 kDa. It migrates as an 25 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.5

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

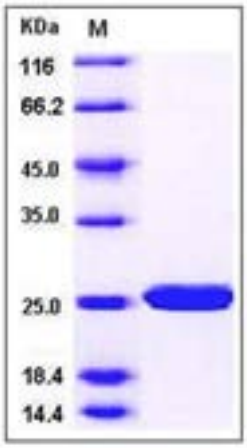
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Superoxide dismutases (SOD) are important anti-oxidant enzymes that guard against superoxide toxicity. In humans, as in all mammals and most chordates, three forms of superoxide dismutase (SOD) are present: SOD1 is located in the cytoplasm, SOD2 in the mitochondria, and SOD3 is extracellular. Mitochondrial superoxide dismutase [SOD; manganese SOD (MnSOD) or SOD2] neutralizes highly reactive superoxide radical (O(

References

1.Culotta VC, *et al.* (2006) Activation of superoxide dismutases: putting the metal to the pedal. Biochim Biophys Acta. 1763(7): 747-58. 2.Bag A, *et al.* (2008) Target sequence polymorphism of human manganese superoxide dismutase gene and its association with cancer risk: a review. Cancer Epidemiol Biomarkers Prev. 17(12): 3298-305. 3.Diehl C, *et al.* (2009) The basis of topical superoxide dismutase antipruritic activity. Acta Dermatovenerol Croat. 17(1): 25-39.