# abcam

# Product datasheet

# Recombinant Human SOD2/MnSOD protein (His tag) ab245919

# 1 Image

**Description** 

Product name Recombinant Human SOD2/MnSOD protein (His tag)

**Purity** > 90 % SDS-PAGE.

Affinity Purified

Expression system Escherichia coli

Accession P04179

Protein length Full length protein

Animal free No

Nature Recombinant

**Species** Human

**Sequence** MLSRAVCGTSRQLAPVLGYLGSRQKHSLPDLPYDYGALE

PHINAQIMQLH

HSKHHAAYVNNLNVTEEKYQEALAKGDVTAQIALQPALKF

NGGGHINHSI

FWTNLSPNGGGEPKGELLEAKRDFGSFDKFKEKLTAAS

VGVQGSGWGWL

GFNKERGHLQIAACPNQDPLQGTTGLIPLLGIDVWEHAYYL

QYKNVRPDY LKAIWNVINWENVTERYMACKK

Predicted molecular weight 25 kDa including tags

Amino acids 1 to 222

Tags His tag N-Terminus

#### **Specifications**

Our Abpromise guarantee covers the use of ab245919 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications SDS-PAGE

Form Liquid

#### **Preparation and Storage**

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#### Stability and Storage

Shipped at 4°C. Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.

Constituents: 0.79% Tris HCI, 0.87% Sodium chloride, 0.08% DTT, 10% Glycerol (glycerin, glycerine)

#### **General Info**

**Function** Destroys superoxide anion radicals which are normally produced within the cells and which are

toxic to biological systems.

Involvement in disease Genetic variation in SOD2 is associated with susceptibility to microvascular complications of

diabetes type 6 (MVCD6) [MIM:612634]. These are pathological conditions that develop in numerous tissues and organs as a consequence of diabetes mellitus. They include diabetic retinopathy, diabetic nephropathy leading to end-stage renal disease, and diabetic neuropathy. Diabetic retinopathy remains the major cause of new-onset blindness among diabetic adults. It is

characterized by vascular permeability and increased tissue ischemia and angiogenesis.

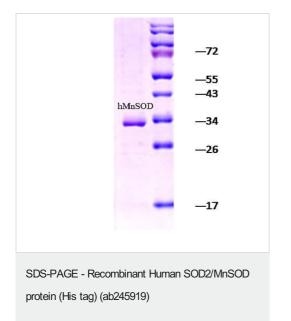
**Sequence similarities**Belongs to the iron/manganese superoxide dismutase family.

Post-translational modifications

Nitrated under oxidative stress. Nitration coupled with oxidation inhibits the catalytic activity.

**Cellular localization** Mitochondrion matrix.

## **Images**



SDS-PAGE analysis of Human MnSOD protein (His tag) (ab245919)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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