

Datasheet for ABIN1686709
SOD2 Protein (partial) (His tag)[Go to Product page](#)

1 Image

Overview

Quantity:	100 µg
Target:	SOD2
Protein Characteristics:	partial
Origin:	Rat
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SOD2 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Specificity:	~25 kDa
Purification:	Affinity Purified
Purity:	>90%

Target Details

Target:	SOD2
Alternative Name:	Mn SOD (SOD2 Products)
Background:	Superoxide dismutase (SOD) is an endogenously produced intracellular enzyme present in almost every cell in the body (3). It works by catalyzing the dismutation of the superoxide radical O_2^- to O_2 and H_2O_2 , which are then metabolized to H_2O and O_2 by catalase and glutathione peroxidase (2, 5). In general, SODs play a major role in antioxidant defense

Target Details

mechanisms (4). There are two main types of SOD in mammalian cells. One form (SOD1) contains Cu and Zn ions as a homodimer and exists in the cytoplasm. The two subunits of 16 kDa each are linked by two cysteines forming an intra-subunit disulphide bridge (3). The second form (SOD2) is a manganese containing enzyme and resides in the mitochondrial matrix. It is a homotetramer of 80 kDa. The third form (SOD3 or EC-SOD) is like SOD1 in that it contains Cu and Zn ions, however it is distinct in that it is a homotetramer, with a mass of 30 kDa and it exists only in the extracellular space(8). SOD3 can also be distinguished by its heparin-binding capacity (1).

Molecular Weight:	approx. 25 kDa
-------------------	----------------

Gene ID:	24787
----------	-------

UniProt:	P07895
----------	------------------------

Pathways:	Sensory Perception of Sound , Transition Metal Ion Homeostasis , Negative Regulation of intrinsic apoptotic Signaling
-----------	---

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
--------------------	--

Comment:	This product has been certified >90% pure using SDS-PAGE analysis.
----------	--

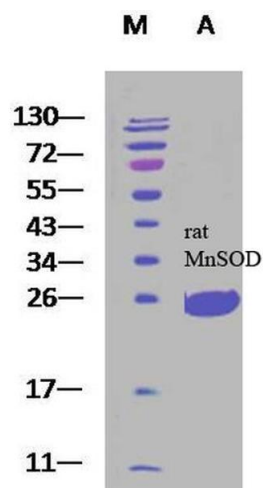
Restrictions:	For Research Use only
---------------	-----------------------

Handling

Concentration:	Lot specific
----------------	--------------

Buffer:	50 mM Tris/HCl pH 7.7, 0.3M NaCl
---------	----------------------------------

Storage:	-20 °C
----------	--------



SDS-PAGE

Image 1. SDS-PAGE of 25 kDa rat Mn SOD (ABIN1686708, ABIN1686709 and ABIN1686710).