

Datasheet for ABIN1686712

SOD2 Protein (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	100 µg
Target:	SOD2
Origin:	Human
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

Sequence:	MLSRAVCGTS RQLAPVLGYL GSRQKHSLPD LPYDYGALP HINAQIMQLH HSKHHAAYVN NLNVTEEKYQ EALAKGDVTA QIALQPALKF NGGGHINHSI FWTNLSPNGG GEPKGELLEA IKRDFGSFDK FKEKLTAASV GVQSGSGWGWL GFNKERGHLQ IAACPNDQPL QGTTGLIPLL GIDVWEHAYY LQYKNVRPDY LKAIWNVINW ENVTERYMAC KK
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

Target Details

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 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
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Gene ID:	24787
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UniProt:	P04179
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Pathways:	Sensory Perception of Sound , Transition Metal Ion Homeostasis , Negative Regulation of intrinsic apoptotic Signaling
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Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
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Comment:	This product has been certified >90% pure using SDS-PAGE analysis.
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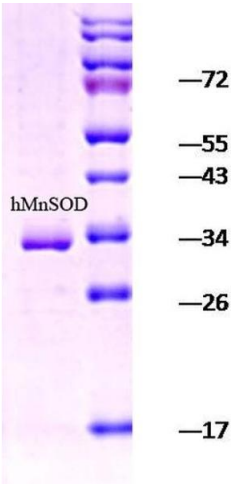
Restrictions:	For Research Use only
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Handling

Concentration:	Lot specific
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Buffer:	50 mM Tris/HCl pH 7.7, 0.15M NaCl, 5 mM DTT, 10 % glycerol
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Storage:	-20 °C
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SDS-PAGE

Image 1. SDS-PAGE of 25 kDa human Mn SOD (ABIN1686711, ABIN1686712 and ABIN1686713).