

Superoxide Dismutase 2, Mitochondrial (SOD2) Active Protein | SOD2 active protein

Active Superoxide Dismutase 2, Mitochondrial (SOD2)

CATALOG # AAA153068	HOST E coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Superoxide Dismutase 2; Mitochondrial (SOD2); Active Superoxide Dismutase 2; Mitochondrial; SOD2 active protein (prokaryotic); Mouse; IPO-B; MNSOD; Mn-SOD; SOD2 active protein

PRODUCT SPECIFICATIONS

Host	E coli
Purity/Purification	Greater than 90% by SDS-PAGE
Form/Format	PBS, pH7.4, containing 0.01% SKL, 5% Trehalose. Freeze-dried powder
Sequence Positions	Lys25~Lys222
Applicable Applications for SOD2 active protein	Activity Assay, Cell Culture
Expression System	Prokaryotic expression
Species	Mouse
Tag	N-terminal His
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	7.3
Research Area	Enzyme & Kinase
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months Stable for 12 months if correctly stored.

IMAGES

Calculation

$$\text{SOD2 activity (U/ml)} = \frac{0.070 - A_{325} / \text{min}}{0.070} \times 100\% \times 0.915 / V \times N$$

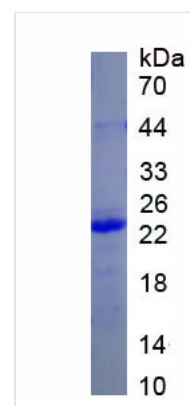
Where:

0.070=pyrogallol autooxidation rate
A325/min= inhibition pyrogallol autooxidation rate of SOD2
0.915= total volume in cuvette
V=sample volume
N=dilution factor

Specific SOD2 activity (U/mg)=SOD2 activity/amount of SOD2 in 1ml.
The specific activity of recombinant mouse SOD2 is 338U/mg

Bioactivity

Extracellular superoxide dismutase [Cu-Zn] is an enzyme that in humans is encoded by the SOD3 gene. This gene encodes a member of the superoxide dismutase (SOD) protein family. SODs are antioxidant enzymes that catalyze the dismutation of two superoxide r



SDS-PAGE

Figure. SDS-PAGE

ADDITIONAL INFORMATION

Product Categories/Family for SOD2 active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	31980762
NCBI GeneID	20656
NCBI Accession #	NP_038699.2
NCBI GenBank Nucleotide #	NM_013671.3
UniProt Accession #	P09671; Q64670; Q8VEM5
Molecular Weight	24,603 Da
NCBI Official Full Name	superoxide dismutase
NCBI Official Synonym Full Names	superoxide dismutase 2, mitochondrial
NCBI Official Symbol	Sod2
NCBI Official Synonym Symbols	MnSOD; Sod-2
NCBI Protein Information	superoxide dismutase [Mn], mitochondrial
UniProt Protein Name	Superoxide dismutase [Mn], mitochondrial
UniProt Gene Name	Sod2
UniProt Synonym Gene Names	Sod-2
UniProt Entry Name	SODM_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/superoxide-dismutase-2-mitochondrial-sod2/153068>