

Superoxide Dismutase 1 (SOD1) Active Protein | SOD1 active protein

Active Superoxide Dismutase 1 (SOD1)

CATALOG # AAA153107	HOST E coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Superoxide Dismutase 1 (SOD1); Active Superoxide Dismutase 1 (SOD1); Superoxide Dismutase 1; SOD1 active protein (prokaryotic); Mouse; ALS; ALS1; IPOA; Soluble; Amyotrophic Lateral Sclerosis 1; Adult; Superoxide dismutase [Cu-Zn]; SOD1 active protein

PRODUCT SPECIFICATIONS

Host	E coli
Purity/Purification	Greater than 95% by SDS-PAGE
Form/Format	PBS, pH7.4, containing 0.01% SKL, 5% Trehalose. Freeze-dried powder
Sequence Positions	Ala2~Gln154
Applicable Applications for SOD1 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	6.3
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

$$\text{SOD1 activity (U/ml)} = \frac{0.070 - A_{325} / \text{min}}{0.070} \times 100\% \times 0.915 / V \times N$$

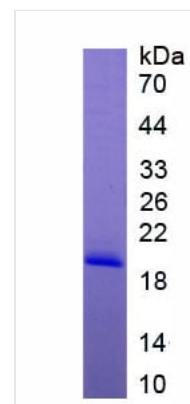
Where:

0.070=pyrogallol autooxidation rate
A₃₂₅/min= inhibition pyrogallol autooxidation rate of SOD1
0.915= total volume in cuvette
V=sample volume
N=dilution factor

Specific SOD1 activity (U/mg)=SOD1 activity/amount of SOD1 in 1ml.
The specific activity of recombinant mouse SOD1 is 374U/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 SOD1 active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	45597447
NCBI GeneID	20655
UniProt Accession #	P08228
NCBI Official Full Name	superoxide dismutase [Cu-Zn] [Mus musculus]
NCBI Official Synonym Full Names	superoxide dismutase 1, soluble
NCBI Official Symbol	Sod1
NCBI Official Synonym Symbols	lpo1; SODC; lpo-1; Sod-1; CuZnSOD; Cu/Zn-SOD; MGC107553; B430204E11Rik; Sod1
UniProt Protein Name	Superoxide dismutase [Cu-Zn]
UniProt Gene Name	Sod1
UniProt Entry Name	SODC_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-1-sod1/153107>