

Catalase (CAT) Active Protein | CAT active protein

Active Catalase (CAT)

CATALOG # AAA153117	HOST E coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Catalase (CAT); Active Catalase (CAT); Catalase; CAT active protein (prokaryotic); Rat; CAT active protein

PRODUCT SPECIFICATIONS

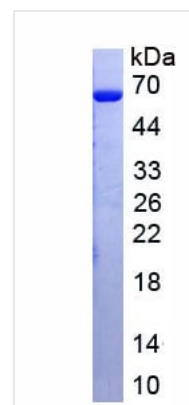
Host	E coli
Purity/Purification	Greater than 95% by SDS-PAGE
Form/Format	PBS, pH7.4, containing 0.01% SKL, 5% Trehalose. Freeze-dried powder
Sequence Positions	Asp3-Leu527
Applicable Applications for CAT active protein	Activity Assay, Cell Culture
Expression System	Prokaryotic expression
Species	Rat
Tag	N-terminal His
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	7.5
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 $CAT(U/mg) = \frac{3.45 \cdot d}{\text{time} \cdot 0.1} / \text{mg enzymatic}$ Where: 3.45=corresponds to the decomposition of 3.45 μmoles of hydrogen peroxide in a 3.0 ml reaction mixture producing a decrease in the A240 from 0.45 to 0.40 d=dilution factor Time=minutes required for the A240 to decrease from 0.45 to 0.40 absorbance units 0.1 = milliliter of enzyme added to the cuvette

Bioactivity

Catalase (CAT) is an antioxidant enzyme present in all aerobic organisms. It is known to catalyze H₂O₂ into water and oxygen in an energy-efficient manner in the cells exposed to environmental stress. H₂O₂ will have specific absorbance at 240 nm . when we



SDS-PAGE
Figure. SDS-PAGE

ADDITIONAL INFORMATION

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

NCBI GI #	6978607
NCBI GeneID	24248
NCBI Accession #	NP_036652.1
NCBI GenBank Nucleotide #	NM_012520.2
UniProt Accession #	P04762
Molecular Weight	59,757 Da
NCBI Official Full Name	catalase
NCBI Official Synonym Full Names	catalase
NCBI Official Symbol	Cat
NCBI Official Synonym Symbols	CS1; Cas1; CatI; Cs-1; Cat01
NCBI Protein Information	catalase
UniProt Protein Name	Catalase
UniProt Gene Name	Cat
UniProt Synonym Gene Names	Cas1

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/catalase-cat/153117>