Datasheet for ABIN7126026

Catalase Protein (CAT) (full length) (rho-1D4 tag)

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Overview

Quantity:	0.5 mg
Target:	Catalase (CAT)
Protein Characteristics:	full length
Origin:	CHO cells
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Catalase protein is labelled with rho-1D4 tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys), Functional Studies (Func)

Product Details

Sequence:	MRFLTPGGDF QRAQLSCSPR SAAPKSYTMA DSRDPASDQM KHWKEQRSLQ KPDVLTTGGG NPIGDKLNIM TAGSRGPLLV QDVVFTDEMA HFDRERIPER VVHAKGAGAF GYFEVTHDIT RYCKAKVFEH IGKRTPIAVR FSTVAGESGS ADTVRDPRGF AVKFYTEDGN WDLVGNNTPI FFIRDAILFP SFIHSQKRNP QTHLKDPDMV WDFWSLRPES LHQVSFLFSD RGIPDGHRHM NGYGSHTFKL VNANGEAVYC KFHYKTDQGI KNLPVAEAAR LTQEDPDYGL RDLFNAIAQG NYPSWTFYIQ VMTFKEAETF PFNPFDLTKI WPHQDYPLIP VGKLVLNRNP VNYFAEVEQM AFDPSNMPPG IEPSPDKMLQ GRLFAYPDTH RHRLGPNYLQ IPVNCPYRAR VANYQRDGPM CMHDNQGGAP NYYPNSFSAP EQQRSALEHR SQCSTDVQRF NSANEDNVTQ VRNFYTKVLN EEERKRLCEN IAGHLKDAQL FIQKKAVKNF TDVHPDYGAR IQALLDKYNA EKPKNAIHTY TQAGSHLAAK EKANL **Sequence without tag. The location of the tag depends on protein. You may also submit your preference when ordering.**

Product Details

Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts. • CHO Catalase Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a custom-made protein and will be made for the first time for your order. This protein will be produced on the basis of on a Custom Service Project. We will make sure that every step in the production is successful from the design of the expression plasmid to the expression and purification of the final protein. Our experts in the lab will ensure that you receive a correctly folded protein. The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer. The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.
Purification:	Three step purification of proteins expressed in baculovirus infected SF9 insect cells: 1. Membrane proteins are fractioned by ultracentrifugation and subsequently solubilized with different detergents (detergent screen). Samples are analyzed by Western blot. 2. The best performing detergent is used for solubilization and the proteins are purified via their rho1D4 tag via two rho1D4 antibody columns: one DTT resistant, the other one not. Eluate fractions are analyzed by Western blot. 3. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatograph. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Endotoxins have not been removed. Please contact us if you require an endotoxin-free version of this product.
Grade:	Crystallography grade
Biological Activity Comment:	Protein has not been tested for activity yet.

Target Details

Target:	Catalase (CAT)
Alternative Name:	Catalase (CAT Products)
Background:	Occurs in almost all aerobically respiring organisms and serves to protect cells from the toxic

Target Details

	effects of hydrogen peroxide. {ECO:0000256|RuleBase:RU004142}.
UniProt:	G3GYY6
Pathways:	Cellular Glucan Metabolic Process, Cell RedoxHomeostasis, Photoperiodism

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	150 mM NaCL, 20 mM NaH2PO4 pH 7.4, 10 % glycerol. Note: Isoelectric point of protein taken into account regarding pH .
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

