

Datasheet for ABIN7194237 **ALAS2 Protein (His tag)**



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Overview

Quantity:	50 µg
Target:	ALAS2
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ALAS2 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human Catalase/CAT Protein (His Tag)
Sequence:	Ala 2-Leu 527
Characteristics:	A DNA sequence encoding the human CAT (P04040) (Ala 2-Leu 527) was expressed, with a polyhistidine tag at the N-terminus.
Purity:	> 80 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	ALAS2
Alternative Name:	alase (ALAS2 Products)
Background:	Background: Catalase is a ubiquitously expressed enzyme that catalyzes the decomposition of hydrogen peroxide to water and oxygen. It is a tetramer of four polypeptides chains containing four porphyrin heme groups that allow the enzyme to react with the hydrogen peroxide. The

Target Details

optimum PH of human catalase is approximately 7 and the optimum temperature is at 37 degree. Both the PH optimum and temperature for other catalases varies depending on the species. Catalase can be inhibited by a flux of O₂⁻ generated in situ by the aerobic xanthine oxidase reaction. This inhibition of catalase by O₂⁻ provides the basis for a synergism between superoxide dismutase and catalase. Such synergisms have been observed in vitro and may be significant in vivo. Catalase is used in the food industry for removing hydrogen peroxide from milk prior to cheese production. Another use is in food wrappers where it prevents food from oxidizing. Catalase is also used in the textile industry, removing hydrogen peroxide from fabrics to make sure the material is peroxide-free.

Synonym: MGC138422, MGC138424

Molecular Weight: 61.9 kDa

UniProt: [P04040](#)

Pathways: [Transition Metal Ion Homeostasis](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile 50 mM Tris, 100 mM NaCl, pH 8.0, 10 % glycerol

Storage: 4 °C, -20 °C, -80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.