

Product Information

Protein:	Catalase (katA) (~ 87.0 kDa)
Uniprot#:	P77872
Sequence:	<pre>MV NKDV KQT TAF G A P V W D D N N V I T A G P R G P V L L Q S T W F L E K L A A F D R E R I P E R V V H A K G S G A Y G T F T V T K D I T K Y T K A K I F S K V G K K T E C F F R F S T V A G E R G S A D A V R D P R G F A M K Y Y T E E G N W D L V G N N T P V F F I R D A I K F P D F I H T Q K R D P Q T N L P N H D M V W D F W S N V P E S L Y Q V T W V M S D R G I P K S F R H M D G F G S H T F S L I N A K G E R F W V K F H F H T M Q G V K H L T N E E A A E V R K Y D P D S N Q R D L F N A I A R G D F P K W K L S I Q V M P E E D A K K Y R F H P F D V T K I W Y L Q D Y P L M E V G I V E L N K N P E N Y F A E V E Q A A F S P A N V V P G I G Y S P D R M L Q G R L F S Y G D T H R Y R L G V N Y P Q I P V N K P R C P F H S S R D G Y M Q N G Y Y G S L Q N Y T P S S L P G Y K E D K S A R D P K F N L A H I E K E F E V W N W D Y R A D D S D Y Y T Q P G D Y Y R S L P A D E K E R L H D T I G E S L A H V T H K E I V D K Q L E H F K K A D P K Y A E G V K K A L E K H Q K M M K D M H G K D M H H T K K K K</pre>
	Methionine at pos. 1 might be present due to cloning constraints, C-terminal His-tag and GFP-fusion not shown in sequence.
Source:	Recombinantly expressed in <i>E. coli</i> .
Tag(s):	GFP/His-Tag, C-terminal
Purification:	Purified by affinity chromatography and subsequent buffer exchange.
Formulation:	PBS; pH 7.4. Liquid, stored and shipped at -80 °C.
Purity:	> 75 % (will be determined by densitometry of Coomassie stained gel, example next page)
Concentration:	Will be determined by BCA-Assay.
Long-term storage:	No recommendations.

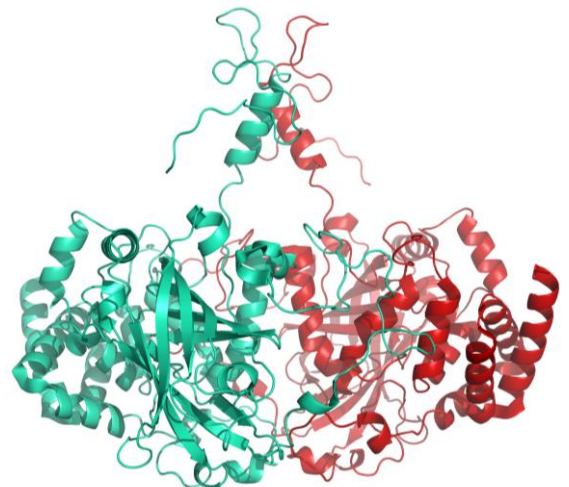
Background Information:

Catalase (KatA) from *Helicobacter pylori* is an enzyme used as biomarker for diagnostic of duodenal ulcer (DU).

Catalases are conserved and abundant enzymes found in all domains of life. They protect against oxidative stress and are highly expressed.

In the gastric pathogen *Helicobacter pylori*, KatA levels are estimated to be up to 4-5% of the total protein content. The presence of the enzyme is ubiquitous, it could be detected in the cytoplasm, the periplasm and on the cell surface as well as being readily detected extracellularly. The enzyme is described to use heme as cofactor.

KatA is used as biomarker for duodenal ulcer (DU) and also for gastric cancer (GC).



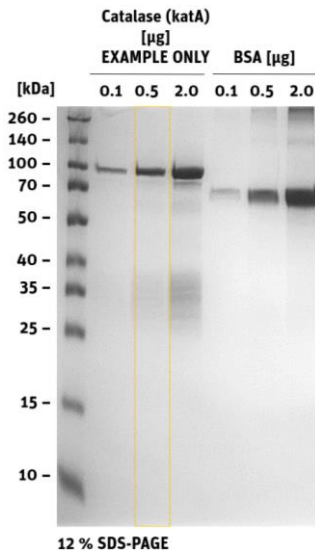
Structural model of Catalase

Catalase (katA)

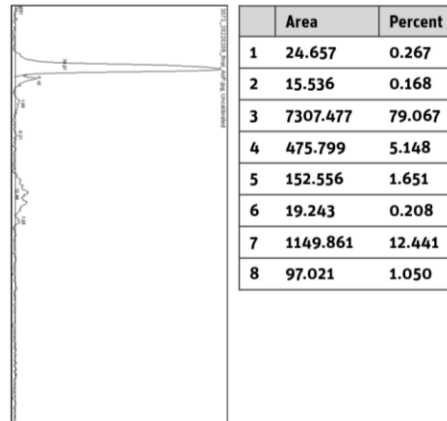
Cat. no. P2020-127

Product Information

Quality Information (provided for each lot):



SDS-PAGE/Coll.Coomassie



Histogram (of marked lane in gel picture)