

Datasheet for ABIN7548310 **HMOX1 Protein (AA 1-288) (His tag)**



Overview

Quantity:	1 mg
Target:	HMOX1
Protein Characteristics:	AA 1-288
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This HMOX1 protein is labelled with His tag.

Product Details

1 Toddet Details	
Purpose:	Custom-made recombinant HMOX1 Protein expressed in mammalian cells.
Sequence:	MERPQPDSMP QDLSEALKEA TKEVHTQAEN AEFMRNFQKG QVTRDGFKLV MASLYHIYVA
	LEEEIERNKE SPVFAPVYFP EELHRKAALE QDLAFWYGPR WQEVIPYTPA MQRYVKRLHE
	VGRTEPELLV AHAYTRYLGD LSGGQVLKKI AQKALDLPSS GEGLAFFTFP NIASATKFKQ
	LYRSRMNSLE MTPAVRQRVI EEAKTAFLLN IQLFEELQEL LTHDTKDQSP SRAPGLRQRA
	SNKVQDSAPV ETPRGKPPLN TRSQAPLLRW VLTLSFLVAT VAVGLYAM Sequence without tag
	The proposed Purification-Tag is based on experiences with the expression system, a
	different complexity of the protein could make another tag necessary. In case you have a
	special request, please contact us.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:

- · Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- · State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

Target Details

Target:	HMOX1
Alternative Name:	HMOX1 (HMOX1 Products)
Background:	Heme oxygenase 1 (HO-1) (EC 1.14.14.18) [Cleaved into: Heme oxygenase 1 soluble
	form],FUNCTION: [Heme oxygenase 1]: Catalyzes the oxidative cleavage of heme at the alpha-
	methene bridge carbon, released as carbon monoxide (CO), to generate biliverdin IXalpha, while
	releasing the central heme iron chelate as ferrous iron (PubMed:7703255, PubMed:11121422,
	PubMed:19556236). Affords protection against programmed cell death and this cytoprotective
	effect relies on its ability to catabolize free heme and prevent it from sensitizing cells to
	undergo apoptosis (PubMed:20055707). {ECO:0000269 PubMed:11121422,
	ECO:0000269 PubMed:19556236, ECO:0000269 PubMed:7703255,
	FOO:000000000 the Mad:000FF707) FUNCTION: [Lamp outgrapes 1]: (Microbial infection)

ECO:0000303|PubMed:20055707}., FUNCTION: [Heme oxygenase 1]: (Microbial infection)

During SARS-COV-2 infection, promotes SARS-CoV-2 ORF3A-mediated autophagy but is
unlikely to be required for ORF3A-mediated induction of reticulophagy.

{ECO:0000269|PubMed:35239449}., FUNCTION: [Heme oxygenase 1 soluble form]: Catalyzes the oxidative cleavage of heme at the alpha-methene bridge carbon, released as carbon monoxide (CO), to generate biliverdin IXalpha, while releasing the central heme iron chelate as

Target Details

	ferrous iron. {ECO:0000269 PubMed:7703255}.
Molecular Weight:	32.8 kDa
UniProt:	P09601
Pathways:	Transition Metal Ion Homeostasis, Regulation of Leukocyte Mediated Immunity, Positive
	Regulation of Immune Effector Process, Production of Molecular Mediator of Immune
	Response, SARS-CoV-2 Protein Interactome
Application Details	
Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested to

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for
	functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months