

Datasheet for ABIN7546915
CYGB Protein (AA 1-190) (His tag)



[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	CYGB
Protein Characteristics:	AA 1-190
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CYGB protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant CYGB Protein expressed in mammalian cells.
Sequence:	MEKVPGEMEI ERRERSEELS EAERKAVQAM WARLYANCED VGVAILVRFF VNFPSAKQYF SQFKHMEDPL EMERSPQLRK HACRVMGALN TVVENLHDPD KVSSVLALVG KAHALKHKVE PVYFKILSGV ILEVVAEEFA SDFPPETQRA WAKLRGLIYS HVTAAYKEVG WWQQVPNATT PPATLPSSGP 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: <ul style="list-style-type: none">• 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

Product Details

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:	CYGB
Alternative Name:	CYGB (CYGB Products)
Background:	<p>Cytoglobin (Histoglobin) (HGb) (Nitric oxygen dioxygenase CYGB) (NOD) (EC 1.14.12.-) (Nitrite reductase CYGB) (EC 1.7.-.-) (Pseudoperoxidase CYGB) (EC 1.11.1.-) (Stellate cell activation-associated protein) (Superoxide dismutase CYGB) (EC 1.15.1.1),FUNCTION: Probable multifunctional globin with a hexacoordinated heme iron required for the catalysis of various reactions depending on redox condition of the cell as well as oxygen availability (PubMed:12359339, PubMed:11893755, PubMed:19147491, PubMed:20511233, PubMed:28671819, PubMed:28393874, PubMed:29128400, PubMed:33576020, PubMed:34930834, PubMed:15165856). Has a nitric oxide dioxygenase (NOD) activity and is most probably involved in cell-mediated and oxygen-dependent nitric oxide consumption (PubMed:19147491, PubMed:20511233, PubMed:28671819, PubMed:28393874). By scavenging this second messenger may regulate several biological processes including endothelium-mediated vasodilation and vascular tone (PubMed:19147491, PubMed:28393874). Under normoxic conditions functions as a nitric oxide dioxygenase (NOD) but under hypoxic conditions the globin may switch its function to that of a nitrite (NO₂) reductase (NiR), generating nitric oxide (PubMed:29128400). Could also have peroxidase and superoxide dismutase activities, detoxifying reactive oxygen species and protecting cells against oxidative stress (PubMed:12359339, PubMed:33576020, PubMed:34930834). Also binds dioxygen with</p>

Target Details

low affinity and could function as an oxygen sensor but has probably no function as a respiratory oxygen carrier (PubMed:11893755, PubMed:15299006, PubMed:20553503).

{ECO:0000269|PubMed:11893755, ECO:0000269|PubMed:12359339, ECO:0000269|PubMed:15165856, ECO:0000269|PubMed:15299006, ECO:0000269|PubMed:19147491, ECO:0000269|PubMed:20511233, ECO:0000269|PubMed:20553503, ECO:0000269|PubMed:28393874, ECO:0000269|PubMed:28671819, ECO:0000269|PubMed:29128400, ECO:0000269|PubMed:33576020, ECO:0000269|PubMed:34930834}.

Molecular Weight: 21.4 kDa

UniProt: [Q8WWM9](#)

Application Details

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