

Datasheet for ABIN7562719  
**COX1 Protein (AA 1-514) (His tag)**



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## Overview

Quantity:	1 mg
Target:	COX1
Protein Characteristics:	AA 1-514
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This COX1 protein is labelled with His tag.

## Product Details

Purpose:	Custom-made recombinant Mtco1 Protein expressed in mammalian cells.
Sequence:	<p>MFINRWLFST NHKDIGTLYL LFGAWAGMVG TALSILIRAE LGQPGALLGD DQIYNVIVTA HAFVMIFFMV MPMIMIGGFGN WLVPMLIGAP DMAFPRMNNM SFWLLPPSFL LLLASSMVEA GAGTGWTVYP PLAGNLAHAG ASVDLTIFSL HLAGVSSILG AINFITTIIN MKPPAMTQYQ TPLFVWSVLI TAVLLLLSLP VLAAGITMLL TDRNLNTTFF DPAGGGDPI YQHLFWFFGH PEVYILILPG FGIISHVVTY YSGKKEPGFY MGMVWAMMSI GFLGFIVWAH HMFTVGLDVD TRAYFTSATM IIAIPTGVKV FSWLATLHGG NIKWSPAMLW ALGFILFTV GGLTGIVLSN SSLDIVLHDT YYVVAHFHYV LSMGAVFAIM AGFVHWFPLF SGFTLDDTWA KAHFAIMFVG VNMTFFPQHF LGLSGMPRRY SDYPDAYTTW NTVSSMGSFI SLTAVLIMIF MIWEAFASKR EVMSVSYAST NLEWLHGCPP PYHTFEEPTY VKVK <b>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.</b></p>

## Product Details

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**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.

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**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.

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

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**Grade:** custom-made

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## Target Details

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**Target:** COX1

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**Alternative Name:** Mtco1 ([COX1 Products](#))

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**Background:** Cytochrome c oxidase subunit 1 (EC 7.1.1.9) (Cytochrome c oxidase polypeptide I),FUNCTION: Component of the cytochrome c oxidase, the last enzyme in the mitochondrial electron transport chain which drives oxidative phosphorylation. The respiratory chain contains 3 multisubunit complexes succinate dehydrogenase (complex II, CII), ubiquinol-cytochrome c oxidoreductase (cytochrome b-c1 complex, complex III, CIII) and cytochrome c oxidase (complex IV, CIV), that cooperate to transfer electrons derived from NADH and succinate to molecular oxygen, creating an electrochemical gradient over the inner membrane that drives transmembrane transport and the ATP synthase. Cytochrome c oxidase is the component of the respiratory chain that catalyzes the reduction of oxygen to water. Electrons originating from reduced cytochrome c in the intermembrane space (IMS) are transferred via the dinuclear copper A center (CU(A)) of subunit 2 and heme A of subunit 1 to the active site in subunit 1, a

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## Target Details

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binuclear center (BNC) formed by heme A3 and copper B (CU(B)). The BNC reduces molecular oxygen to 2 water molecules using 4 electrons from cytochrome c in the IMS and 4 protons from the mitochondrial matrix. {ECO:0000250|UniProtKB:P00401}.

Molecular Weight: 56.9 kDa

UniProt: [P00397](#)

Pathways: [Proton Transport](#)

## Application Details

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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

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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