

Datasheet for ABIN7559429
CYP51A1 Protein (AA 1-503) (His tag)



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Overview

| | |
|-------------------------------|--|
| Quantity: | 1 mg |
| Target: | CYP51A1 |
| Protein Characteristics: | AA 1-503 |
| Origin: | Mouse |
| Source: | HEK-293 Cells |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This CYP51A1 protein is labelled with His tag. |
| Application: | SDS-PAGE (SDS), Western Blotting (WB) |

Product Details

| | |
|-----------|--|
| Purpose: | Custom-made recombinat Cyp51a1 Protein expressed in mammalien cells. |
| Sequence: | MVLLGLLQSG GWVLGQAMEQ VTGGNLLSTL LIACFTLSL VYLFRLAVGH MVQLPAGAKS PPHIYSPIPF LGHAIAFGKS PIEFLENAYE KYGPVFSFTM VGKTFTYLLG SDAALLFNS KNEDLNAEEV YGRLTTPVFG KGVAYDVPNA IFLEQKIIK SGLNIAHFKQ YVPIIEKEAK EYFQSWGESG ERNVFEALSE LIILTASHCL HGKEIRSQLN EKVAQLYADL DGGFTHAAWL LPAWLPLPSF RRRDRAHREI KNIFYKAIQK RRLSKEPAED ILQTLLDSTY KDGRPLTDEE ISGMLIGLLL AGQHTSSTTS AWMGFFLAKD KPLQEKCYLE QKAVCGEDLP PLTYDQLKDL NLLDRCIKET LRLRPPIMTM MRMAKTPQTV AGYTIPPGHQ VCVSPTVNQR LKDSWAERLD FNPDRYLQDN PASGEKFAYV PFGAGRHRVC GENFAYVQIK TIWSTMLRLY EFDLINGYFP TVNYTTMIHT PENPVIRYKR RSK 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. |

Product Details

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, Western Blot

Grade:

custom-made

Target Details

Target:

CYP51A1

Alternative Name:

Cyp51a1 ([CYP51A1 Products](#))

Background:

Lanosterol 14-alpha demethylase (LDM) (EC 1.14.14.154) (CYPLI) (Cytochrome P450 51A1) (CYP51) (Cytochrome P450-14DM) (Cytochrome P45014DM) (Cytochrome P450LI) (Sterol 14-alpha demethylase),FUNCTION: Sterol 14alpha-demethylase that plays a critical role in the cholesterol biosynthesis pathway, being cholesterol the major sterol component in mammalian membranes as well as a precursor for bile acid and steroid hormone synthesis (PubMed:21705796). Cytochrome P450 monooxygenase that catalyzes the three-step oxidative removal of the 14alpha-methyl group (C-32) of sterols such as lanosterol (lanosta-8,24-dien-3beta-ol) and 24,25-dihydrolanosterol (DHL) in the form of formate, and converts the sterols to 4,4-dimethyl-5alpha-cholesta-8,14,24-trien-3beta-ol and 4,4-dimethyl-8,14-cholestadien-3beta-ol, respectively, which are intermediates of cholesterol biosynthesis (PubMed:21705796). Can also demethylate substrates not intrinsic to mammals, such as eburicol (24-methylene-24,25-dihydrolanosterol), but at a lower rate than DHL (By similarity). {ECO:0000250|UniProtKB:Q64654, ECO:0000269|PubMed:21705796}.

Target Details

Molecular Weight: 56.8 kDa

UniProt: [Q8K0C4](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. 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