

Product Information

MemDX™ Membrane Protein Human CYP51A1 (Cytochrome P450 family 51 subfamily A member 1) Full Length

Cat. No.: **MPC4718K**

This product is for research use only and is not intended for diagnostic use.

This product is a made-to-order Human CYP51A1 membrane protein expressed in HEK293. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species

Human

Target Protein

CYP51A1

Protein Length

Full length

Protein Class

Oxidoreductase

TMD

1

Sequence

MLLLGLLQAGGSVLGQAMEKVTGGNLLSMLLIACAFTLSLVYLIRLAAGH
LVQLPAGVKSPPIYFSPFLGHAIAFGKSPIEFLENAYEKYGPVFSFTM
VGKTFYLLGSDAAALLFNSKNEDLNAEDVYSRLTTPVFGKGVAYDVPNP
VFLEQKKMLKSGLNIAHFKQHVSIIKETKEYFESWGEGEKNVFEALSE
LIILTASHCLHGKEIRSQLNEKVAQLYADLDGGFSHAAWLLPGWLPLPSF
RRRDRAHREIKDIFYKAIQKRRQSQEKIDDILQTLDDATYKDRPLTDDDE
VAGMLIGLLLAGQHTSSTTSAWMGFFLARDKTLQKKCYLEQKTVCGENLP
PLTYDQLKDLNLLDRCIKETLRLRPPIMIMMRMARTPQTVAGYTIPPGHQ
VCVSPTVNQRLKDSWVERLDFNPDRYLQDNPASGEKFAYVFPFAGGRHRCI
GENFAYVQIKTIWSTMLRLYEFDLIDGYFPTVNYTTMIHTPENPVIRYKR
RSK

Product Description

Expression Systems

HEK293

Tag

Based on specific requirements

Protein Format

Detergent or based on specific requirements (Detergent, Liposome, Nanodisc, Polymer, VLP)

Form

Liquid

Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -72°C or lower. Avoid freeze/thaw cycles.

Target**Target Protein**

CYP51A1

Full Name

Cytochrome P450 family 51 subfamily A member 1

Introduction

This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This endoplasmic reticulum protein participates in the synthesis of cholesterol by catalyzing the removal of the 14 α -methyl group from lanosterol. Homologous genes are found in all three eukaryotic phyla, fungi, plants, and animals, suggesting that this is one of the oldest cytochrome P450 genes. Two transcript variants encoding different isoforms have been found for this gene.

Alternative Names

CYP51A1; LDM; CP51; CYP51; CYPL1; P450L1; P450-14DM; lanosterol 14- α demethylase; CYPLI; cytochrome P450 51A1; cytochrome P450, 51 (lanosterol 14- α -demethylase); cytochrome P450, family 51, subfamily A, polypeptide 1; cytochrome P450-14DM; cytochrome P45014DM; cytochrome P450LI; sterol 14- α demethylase; Cytochrome P450 family 51 subfamily A member 1

Gene ID

[1595](#)

UniProt ID

[Q16850](#)