

Product Information

MemDX™ Membrane Protein Human CYP3A4 (Cytochrome P450 family 3 subfamily A member 4) Full Length

Cat. No.: **MPC1137K**

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

This product is a 57.3 kDa Human CYP3A4 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

CYP3A4

Protein Length

Full length

Protein Class

Oxidoreductase

Molecular Weight

57.3 kDa

TMD

1

Sequence

MALIPDLAMETWLLLAVSLVLLYLYGTHSHGLFKKLGIPGPTPLPFLGNI
LSYHKGFCMFDMECHKKYGKVWGFYDQQPVLAITDPDMIKTVLVKECYS
VFTNRRPFGPVGFMKSAISIAEDEEWKRLRSLLSPTFTSGKLEMPVPIIA
QYGDVLVRNLRREAETGKPVTLKDVFGAYSMDVITSTSGVNIIDSLNNPQ
DPFVENTKKLLRFDLDPFFLSITVFPFLIPILEVLNICVFPREVTNFLR
KSVKRMKESRLEDTQKHRVDFLQLMIDSQNSKETESHKALSDLELVAQSI
IFIFAGYETTSSVLSFIMYELATHPDVQQKLQEEIDAVLPNKAPPTYDTV
LQMEYLDMMVNETLRLFPAMRLERVCKKDVEINGMFIPKGVVVMIPSYA
LHRDPKYWTEPEKFLPERFSKKNKDIDPYIYTPFGSGPRNCIGMRFALM
NMKLALIRVLQNFSFKPKETQIPLKLSLGGLLQPEKPVVLKVESRDGT
VSGA

Product Description

Expression Systems

HEK293

Based on specific requirements

Protein Format

Detergent or based on specific requirements

Form

Liquid

Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

Target

Target Protein

CYP3A4

Full Name

Cytochrome P450 family 3 subfamily A member 4

Introduction

This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases that catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum and its expression is induced by glucocorticoids and some pharmacological agents. This enzyme is involved in the metabolism of approximately half the drugs in use today, including acetaminophen, codeine, cyclosporin A, diazepam, erythromycin, and chloroquine. The enzyme also metabolizes some steroids and carcinogens. This gene is part of a cluster of cytochrome P450 genes on chromosome 7q21.1. Previously another CYP3A gene, CYP3A3, was thought to exist; however, it is now thought that this sequence represents a transcript variant of CYP3A4. Alternatively spliced transcript variants encoding different isoforms have been identified.

Alternative Names

CYP3A4; HLP; CP33; CP34; CYP3A; NF-25; VDDR3; CYP3A3; P450C3; CYP11A3; CYP11A4; P450PCN1; cytochrome P450 3A4; 1,4-cineole 2-exo-monooxygenase; 1,8-cineole 2-exo-monooxygenase; P450-III, steroid inducible; albendazole monooxygenase (sulfoxide-forming); albendazole sulfoxidase; cholesterol 25-hydroxylase; cytochrome P450 3A3; cytochrome P450 HLP; cytochrome P450 NF-25; cytochrome P450, family 3, subfamily A, polypeptide 4; cytochrome P450, subfamily IIIA (naphedipine oxidase), polypeptide 3; cytochrome P450, subfamily IIIA (naphedipine oxidase), polypeptide 4; cytochrome P450-PCN1; glucocorticoid-inducible P450; nifedipine oxidase; quinine 3-monooxygenase; taurochenodeoxycholate 6- α -hydroxylase; Cytochrome P450 family 3 subfamily A member 4

Gene ID

1576

UniProt ID

P08684