

Product Information

MemDX™ Membrane Protein Human CYP1A1 (Cytochrome P450 family 1 subfamily A member 1) for Antibody Discovery

Cat. No.: **MP0621J**

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

This product is a 58 kDa Human CYP1A1 membrane protein expressed in HEK293T. 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

CYP1A1

Protein Length

Full-length

Protein Class

Druggable Genome, P450, Transmembrane

Molecular Weight

58 kDa

Sequence

MLFPISMSATEFLLASVIFCLVFWVIRASRPQVPKGLKNPPGPWGWPLIGHMLTLGKNPHLALSRMSQQY
GDVLQIRIGSTPVVVLGSLDTIRQALVRQGDDFKGRPDLYTFTLISNGQSMSFSPDGPVWAARRRLAQN
GLKSFSIASDPASSTSCYLEEHVSKEAEVLISLQELMAGPGHFNPYRYVVSVTNVICAICFGRRYDHN
HQELLSLVNLNNNFGEVVGSGNPADFIPLRYLPNPSLNAFKDLNEKFYSFMQKMVKEHYKTFEKGHIRD
ITDSLIEHCQEKQLDENANVQLSDEKIINIVLDLFGAGFDTVTTAISWSLMYLMNPRVQRKIQEELDTV
IGRSRRPRLSDRSHLPYMEAFILETFRHSSFVPFTIPHSTTRDTSLKGFYIPKGRCVFVNQWQINHDQKL
WVNPSEFLPERFLTPDGAIDKVLSEKVIIFGMGKRKCIGETIARWEVFLFLAILLQRVEFSVPLGVKVD
MPIYGLTMKHACCEHFQMQLRS

Product Description

Expression Systems

HEK293T

Tag

C-Myc/DDK

Form

Liquid

Purification

Anti-DDK affinity column followed by conventional chromatography steps

Purity

> 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer

25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol

Storage

Store at +4°C for up to one week or several months at -80°C

Target

Target Protein

CYP1A1

Full Name

Cytochrome P450 family 1 subfamily A member 1

Introduction

This gene, CYP1A1, 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 protein localizes to the endoplasmic reticulum and its expression is induced by some polycyclic aromatic hydrocarbons (PAHs), some of which are found in cigarette smoke. The enzyme's endogenous substrate is unknown; however, it is able to metabolize some PAHs to carcinogenic intermediates. The gene has been associated with lung cancer risk. A related family member, CYP1A2, is located approximately 25 kb away from CYP1A1 on chromosome 15. Alternative splicing results in multiple transcript variants encoding distinct isoforms.

Alternative Names

AHH; AHRR; CP11; CYP1; CYP1A1; P1-450; P450-C; P450DX

Gene ID

[1543](#)

UniProt ID

[P04798](#)