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Product Information

MemDX™ Membrane Protein Human CYP7A1 (Cytochrome P450 family 7 subfamily A member 1) for Antibody Discovery

Cat. No.: **MP1253J**
This product is for research use only and is not intended for diagnostic use.

This product is a 57.5 kDa Human CYP7A1 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
CYP7A1

Protein Length
Full-length

Protein Class
Druggable Genome, ES Cell Differentiation/IPS, P450, Transmembrane

Molecular Weight
57.5 kDa

TMD
1

Sequence
MMTTSLIWGIAIAACCCLWLILGIRRRQTGEPPLENGLIPYLGCALQFGANPLEFLRANQRKHGHVFTCK
LMGKYVHFITNPLSYHKVLCHGKYFDWKKFHFATSAKAFGHRSIDPMDGNTTENINDTFIKTLQGHALNS
LTESMMENLQRIMRPPVSSNSKTAAWVTEGMYSFCYRVMFEAGYLTIFGRDLTRRDTQKAHILNNLDNFK
QFDKVFPALVAGLPIHMFRTAHNAREKLAESLRHENLQKRESISELISLRMFLNDTLSTFDDLEKAKTHL
VVLWASQANTIPATFWSLFQMIRNPEAMKAATEEVKRTLENAGQKVSLEGNPICLSQAELNDLPVLDSII
KESLRLSSASLNIRTAKEDFTLHLEDGSYNIRKDDIIALYPQLMHLDPEIYPDPLTFKYDRYLDENGKTK
TTFYCNGLKLKYYYMPFGSGATICPGRLFAIHEIKQFLILMLSYFELELIEGQAKCPPLDQSRAGLGILP
PLNDIEFKYKFKHL

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

CYP7A1

Full Name

Cytochrome P450 family 7 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 membrane protein catalyzes the first reaction in the cholesterol catabolic pathway in the liver, which converts cholesterol to bile acids. This reaction is the rate limiting step and the major site of regulation of bile acid synthesis, which is the primary mechanism for the removal of cholesterol from the body. Polymorphisms in the promoter of this gene are associated with defects in bile acid synthesis.

Alternative Names

CP7A; CYP7; CYPVII; cytochrome P450 7A1; 24-hydroxycholesterol 7-alpha-hydroxylase; cholesterol 7-alpha-hydroxylase; cholesterol 7-alpha-monooxygenase; cholesterol 7alpha-hydroxylase; cytochrome P450, family 7, subfamily A, polypeptide 1

Gene ID

1581

UniProt ID

P22680