

# **Product Information**

# MemDX™ Membrane Protein Human CYP7B1 (Cytochrome P450 family 7 subfamily B member 1) Full Length

Cat. No.: MPC4723K

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

This product is a made-to-order Human CYP7B1 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**

CYP7B1

# **Protein Length**

Full length

# **Protein Class**

Oxidoreductase

# **TMD**

2

# Sequence

MAGEVSAATGRFSLERLGLPGLALAAALLLLALCLLVRRTRRPGEPPLIK GWLPYLGVVLNLRKDPLRFMKTLQKQHGDTFTVLLGGKYITFILDPFQYQ LVIKNHKQLSFRVFSNKLLEKAFSISQLQKNHDMNDELHLCYQFLQGKSL DILLESMMQNLKQVFEPQLLKTTSWDTAELYPFCSSIIFEITFTTIYGKV IVCDNNKFISELRDDFLKFDDKFAYLVSNIPIELLGNVKSIREKIIKCFS SEKLAKMQGWSEVFQSRQDVLEKYYVHEDLEIGAHHLGFLWASVANTIPT MFWAMYYLLRHPEAMAAVRDEIDRLLQSTGQKKGSGFPIHLTREQLDSLI CLESSIFEALRLSSYSTTIRFVEEDLTLSSETGDYCVRKGDLVAIFPPVL HGDPEIFEAPEEFRYDRFIEDGKKKTTFFKRGKKLKCYLMPFGTGTSKCP GRFFALMEIKQLLVILLTYFDLEIIDDKPIGLNYSRLLFGIQYPDSDVLF RYKVKS

# **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**

CYP7B1

#### **Full Name**

Cytochrome P450 family 7 subfamily B 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 of extrahepatic tissues, which converts cholesterol to bile acids. This enzyme likely plays a minor role in total bile acid synthesis, but may also be involved in the development of atherosclerosis, neurosteroid metabolism and sex hormone synthesis. Mutations in this gene have been associated with hereditary spastic paraplegia (SPG5 or HSP), an autosomal recessive disorder.

# **Alternative Names**

CYP7B1; CP7B; CBAS3; SPG5A; cytochrome P450 7B1; 24-hydroxycholesterol 7-alpha-hydroxylase; 25-hydroxycholesterol 7-alpha-hydroxylase; 25/26-hydroxycholesterol 7-alpha-hydroxylase; 3-hydroxysteroid 7-alpha-hydroxylase; cytochrome P450, subfamily VIIB (oxysterol 7 alpha-hydroxylase), polypeptide 1; oxysterol 7-alpha-hydroxylase; Cytochrome P450 family 7 subfamily B member 1

# Gene ID

9420

**UniProt ID** 

<u>075881</u>