

# Product Information

## MemDX™ Membrane Protein Human CYB5R3 (Cytochrome b5 reductase 3) for Antibody

### Discovery

Cat. No.: **MP0298X**

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

This product is a 58.85 kDa Human CYB5R3 membrane protein expressed in *in vitro* wheat germ expression system. 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

CYB5R3

#### Protein Length

Full-length

#### Molecular Weight

58.85 kDa

#### Sequence

MGAQLSTLGHMVLFPVWFLYSLLMKLFQRSTPAITLESPIKYPLRLIDREIISHDTRRRFRFALPSPQHILGLPVGQHIYLSARIDGNLV

### Product Description

#### Application

Enzyme-linked Immunoabsorbent Assay, Western Blot (Recombinant protein), Antibody Production, Protein Array

#### Expression Systems

*in vitro* wheat germ expression system

#### Tag

GST-tag at N-terminal

#### Form

Liquid

#### Purification

Glutathione Sepharose 4 Fast Flow

#### Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer

### Storage

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

### Target

#### Target Protein

CYB5R3

#### Full Name

Cytochrome b5 reductase 3

#### Introduction

This gene encodes cytochrome b5 reductase, which includes a membrane-bound form in somatic cells (anchored in the endoplasmic reticulum, mitochondrial and other membranes) and a soluble form in erythrocytes. The membrane-bound form exists mainly on the cytoplasmic side of the endoplasmic reticulum and functions in desaturation and elongation of fatty acids, in cholesterol biosynthesis, and in drug metabolism. The erythrocyte form is located in a soluble fraction of circulating erythrocytes and is involved in methemoglobin reduction. The membrane-bound form has both membrane-binding and catalytic domains, while the soluble form has only the catalytic domain. Alternate splicing results in multiple transcript variants. Mutations in this gene cause methemoglobinemias

#### Alternative Names

B5R; DIA1; NADH-cytochrome b5 reductase; OTTHUMP00000028761; cytochrome b5 reductase; diaphorase (NADH) (cytochrome b-5 reductase)

#### Gene ID

[1727](#)

#### UniProt ID

[P00387](#)