

# Product Information

## **MemDX™ Membrane Protein Human CYBB (Cytochrome b-245 beta chain) expressed in Yeast for Antibody Discovery**

Cat. No.: **MP1383J**

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

This product is a 35.2 kDa Human CYBB membrane protein expressed in Yeast. 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**

CYBB

#### **Protein Length**

Partial (283-570aa)

#### **Protein Class**

Ion Channel

#### **Molecular Weight**

35.2 kDa

#### **Sequence**

ERLVRFWRSQQKVVITKVVTHPFKTIELQMKKKGFKMEVGQYIFVKCPKVSLEWHPFTLTSAPEEDFFSIHIRIVGDWTEGLFNAC

### Product Description

#### **Expression Systems**

Yeast

#### **Tag**

N-6xHis

#### **Form**

Liquid or Lyophilized powder

#### **Reconstitution**

Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration).

#### **Purity**

>85% as determined by SDS-PAGE

### Buffer

Liquid: Tris/PBS-based buffer, 5%-50% glycerol

Lyophilized powder: Tris/PBS-based buffer, 6% Trehalose, pH 8.0

### Storage

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

## Target

### Target Protein

CYBB

### Full Name

Cytochrome b-245 beta chain

### Introduction

Cytochrome b (-245) is composed of cytochrome b alpha (CYBA) and beta (CYBB) chain. It has been proposed as a primary component of the microbicidal oxidase system of phagocytes. CYBB deficiency is one of five described biochemical defects associated with chronic granulomatous disease (CGD). In this disorder, there is decreased activity of phagocyte NADPH oxidase; neutrophils are able to phagocytize bacteria but cannot kill them in the phagocytic vacuoles. The cause of the killing defect is an inability to increase the cell's respiration and consequent failure to deliver activated oxygen into the phagocytic vacuole.

### Alternative Names

AMCBX2; CGD; CGD91-phox; CY24B\_HUMAN; CYBB; Cytochrome b 245; beta polypeptide; Cytochrome b(558) beta chain; Cytochrome b(558) subunit beta; Cytochrome b-245 heavy chain; Cytochrome b558 subunit beta; GP91 PHOX; gp91-1; gp91-phox; GP91PHOX; Heme-binding membrane glycoprotein gp91phox; NADPH oxidase 2; Neutrophil cytochrome b 91 kDa polypeptide; NOX2; p22 phagocyte B-cytochrome; P91 PHOX; p91-PHOX; Superoxide-generating NADPH oxidase heavy chain subunit

### Gene ID

[1536](#)

### UniProt ID

[P04839](#)