

Product Information

MemDX™ Membrane Protein Human CYBB (Cytochrome b-245 beta chain)

Cat. No.: **MP0016F**

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

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

Full Length

Protein Class

Enzyme

Molecular Weight

55 kDa

TMD

2

Sequence

MGNWAVNEGLSIFVILVWLGLNVFLFVWYYRVYDIPPKFFYTRKLLGSALALARAPAAACL
NFNCMLILLPVCRNLLSFLRGSSACCSTRVRRQLDRNLTFHKMVAWMIALHSAIHTIAHL
FNVEWCVNARVNNSDPYSVALSELGDRQNESYLNFAKRIKNPEGGLYLAVTLLAGITGV
VITLCLILIITSSTKTIRRSYFEVFWYTHHLFVIFFIGLAIHGAERIVRGQTAESESLAVHN
ITVCEQKISEWGKIKECPIQFAGNPPMTWKWIVGPMFLYLCERLVRFWRSQQKVVITKV
VTHPFKTIELQMKKKGFKMEVGQYIFVKCPKVSLEWHPFTLTSAPEEDFFSIHIRIVGD
WTEGLFNACGCDKQEFQDAWKLPKIAVDGPFGTASEDVFSYEVVMLVGAGIGVTPFASIL
KSVWYKYCNNATNLKLLKIYFYWLCRDTHAFEFWADLLQLLESQMQRNNAAGFLSYNIYL
TGWDESQANHFVHHDEEKDVITGLKQKTLYGRPNWDNEFKTIASQHPNTRIGVFLCGPE
ALAETLSKQSISNSES GPRGVHFIFNKENF

Product Description

Activity

Yes

Application

Screening & display technologies

Expression Systems

Cell-free expression system

Tag

Histidine tag fused to the N-terminal end of the protein

Protein Format

Proteoliposome

Form

Powder

Purification

Sucrose gradient

Purity

>50% by SDS-Page and Coomassie Blue staining

Buffer

Tris 50mM, pH 7.5

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

CGD, NOX2, IMD34, AMCBX2, GP91-1, GP91PHOX, p91-PHOX, GP91-PHOX

Gene ID

[1536](#)

UniProt ID

[P04839](#)