

# Product Information

## **MemDX™ Membrane Protein Human EBP (EBP cholesterol delta-isomerase) Expressed *in vitro* E.coli expression system, Full Length of Mature Protein**

Cat. No.: **MPX2248K**

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

This product is a Human EBP membrane protein expressed *in vitro* E.coli 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

EBP

#### Protein Length

Full Length of Mature Protein

#### Protein Class

Receptor

#### TMD

4

#### Sequence

TTNAGPLHPYWPQHRLDNFVPNDRPTWHILAGLFSVTGVLVTTWLLSGRAAVVPLGTWRRLSLCWFAVCGFIHLVIEGWFLYY

### Product Description

#### Expression Systems

*in vitro* E.coli expression system

#### Tag

10xHis tag at the N-terminus

#### Protein Format

Soluble

#### Form

Liquid or Lyophilized powder

#### Buffer

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

### Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

### Target

#### Target Protein

EBP

#### Full Name

EBP cholesterol delta-isomerase

#### Introduction

The protein encoded by this gene is an integral membrane protein of the endoplasmic reticulum. It is a high affinity binding protein for the antiischemic phenylalkylamine Ca<sup>2+</sup> antagonist [3H]emopamil and the photoaffinity label [3H]azidopamil. It is similar to sigma receptors and may be a member of a superfamily of high affinity drug-binding proteins in the endoplasmic reticulum of different tissues. This protein shares structural features with bacterial and eukaryotic drug transporting proteins. It has four putative transmembrane segments and contains two conserved glutamate residues which may be involved in the transport of cationic amphiphilics. Another prominent feature of this protein is its high content of aromatic amino acid residues (>23%) in its transmembrane segments. These aromatic amino acid residues have been suggested to be involved in the drug transport by the P-glycoprotein. Mutations in this gene cause Chondrodysplasia punctata 2 (CDPX2; also known as Conradi-Hunermann syndrome).

#### Alternative Names

EBP; CPX; CHO2; CPXD; MEND; CDPX2; 3-beta-hydroxysteroid-Delta(8),Delta(7)-isomerase; 3-beta-hydroxysteroid-delta-8,delta-7-isomerase; Chondrodysplasia punctata-2, X-linked dominant (Happle syndrome); D8-D7 sterol isomerase; cholesterol Delta-isomerase; delta(8)-Delta(7) sterol isomerase; emopamil binding protein (sterol isomerase); emopamil-binding protein; sterol 8-isomerase; EBP cholesterol delta-isomerase

#### Gene ID

[10682](#)

#### UniProt ID

[Q15125](#)