

Product Information

MemDX™ Antibody Discovery - Human CD3 epsilon & CD3 delta Heterodimer (23-126(CD3E)&22-105(CD3D)) Membrane Protein, Partial, -Fc-His & -Fc-Flag tag, [Biotin]

Cat. No.: **MP1256F**

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

This membrane protein is Human CD3 epsilon & CD3 delta Heterodimer (23-126(CD3E)&22-105(CD3D)). It has been tested in SDS-PAGE, ELISA. We provide this protein to facilitate your membrane protein antibody discovery and development.

Product Specifications

Host Species

Human

Target Protein

CD3 epsilon & CD3 delta Heterodimer

Protein Length

ECD

Molecular Weight

The subunit CD3E carries a human IgG1 Fc fragment at the C-terminus, followed by a polyhistidine tag. The subunit CD3D carries a human IgG1 Fc fragment at the C-terminus, followed by a flag tag. The protein has a calculated MW of 39.2 kDa (CD3E) and 37.5 kDa (CD3D). The protein migrates as 45-55 kDa on a SDS-PAGE gel under reducing (R) condition due to glycosylation.

Sequence

AA Asp 23 - Asp 126 (CD3E) & Phe 22 - Ala 105 (CD3D) (Accession # NP_000724.1 (CD3E) & NP_000723.1 (CD3D)).

Product Description

Activity

Yes

Application

SDS-PAGE, ELISA

Expression Systems

HEK293

Tag

CD3E subunit contains C terminal human IgG Fc tag and His tag; CD3D subunit contains C terminal human IgG Fc tag and Flag tag.

Protein Format

Soluble

Form

LYOPH

Reconstitution

Please see Certificate of Analysis for specific instructions.

Endotoxin

<1.0 EU/μg by the LAL method

Conjugation

Biotin

Purity

>95% as determined by SDS-PAGE.

Buffer

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

Storage

Stored at lyophilized form at -20°C or lower. Avoid repeated freeze-thaw cycles.

The antigen can be stable for 12 months in lyophilized form after storage at -20°C to -80°C, 3 months under sterile conditions after reconstitution after storage at -80°C.

Target**Target Protein**

CD3 epsilon & CD3 delta Heterodimer

Full Name

CD3e molecule&CD3d molecule

Introduction

The protein encoded by this gene is the CD3-epsilon polypeptide, which together with CD3-gamma, -delta and -zeta, and the T-cell receptor alpha/beta and gamma/delta heterodimers, forms the T-cell receptor-CD3 complex. This complex plays an important role in coupling antigen recognition to several intracellular signal-transduction pathways. The genes encoding the epsilon, gamma and delta polypeptides are located in the same cluster on chromosome 11. The epsilon polypeptide plays an essential role in T-cell development. Defects in this gene cause immunodeficiency. This gene has also been linked to a susceptibility to type I diabetes in women.

Alternative Names

CD3-epsilon, CD3e antigen, epsilon polypeptide (TiT3 complex), CD3e molecule, epsilon (CD3-TCR complex), T-cell antigen receptor complex, epsilon subunit of T3, T-cell surface antigen T3/Leu-4 epsilon chain, T-cell surface glycoprotein CD3 delta chain, CD3d molecule, delta (CD3-TCR complex)

Gene ID

[916](#); [915](#)

UniProt ID

[P07766](#); [P04234](#)