

Product Information

MemDX™ Antibody Discovery - Mouse CD3 epsilon & CD3 delta Heterodimer (23-108(CD3E)&22-105(CD3D)) Membrane Protein, Partial, -His tag & -Flag tag

Cat. No.: **MP1251F**

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

This membrane protein is Mouse CD3 epsilon & CD3 delta Heterodimer (23-108(CD3E)&22-105(CD3D)). It has been tested in SDS-PAGE, SEC-SEC-MALS, ELISA. We provide this protein to facilitate your membrane protein antibody discovery and development.

Product Specifications

Host Species

Mouse

Target Protein

CD3 epsilon & CD3 delta Heterodimer

Protein Length

ECD

Molecular Weight

Mouse CD3E&CD3D Heterodimer Protein, His Tag&Flag Tag is produced by co-expression of CD3E and CD3D, has a calculated MW of 15.1 kDa (CD3E) and 14.3 kDa (CD3D). Subunit CD3E is fused with a polyhistidine tag at the C-terminus and subunit CD3D is fused with a flag tag at the C-terminus. The reducing (R) heterodimer protein migrates as 19 kDa and 25-33 kDa due to glycosylation.

Sequence

AA Asp 23 - Asp 108 (CD3E) & Phe 22 - Ala 105 (CD3D) (Accession # P22646-1(CD3E) & P04235-1(CD3D)).

Product Description

Activity

Yes

Application

SDS-PAGE, SEC-SEC-MALS, ELISA

Expression Systems

HEK293

Tag

Subunit CD3E is fused with a His tag at the C-terminus and subunit CD3D is fused with a flag tag at the C-terminus.

Protein Format

Soluble

Form

LYOPH

Reconstitution

Please see Certificate of Analysis for specific instructions.

Endotoxin

<1.0 EU/µg by the LAL method

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

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

[12501](#); [12500](#)

UniProt ID

[P22646](#); [P04235](#)