# Human CD3E \& CD3G Heterodimer recombinant protein 

Catalog Number: 501757

## General Information

## Gene Name Synonym

T-cell surface antigen T3/Leu-4 epsilon chain

## Protein Construction

A DNA sequence encoding the extracellular domain (Met1-Asp126) of human CD3E (NP_000724.1) was fused with the C-terminal polyhistidine-tagged Fc region of human IgG1 at the C-terminus, constructed the plasmid 1; A DNA sequence encoding the extracellular domain (Met1-Ser116) of human CD3G (NP_000064.1) was fused the Fc region of mouse IgG1 at the Cterminus, constructed the plasmid 2. The two plasmids were co-expressed and the human CD3E/CD3G heterodimer was purified.

## Organism

Human

## Expression Host

Human Cells

## QC Testing

## Activity

Measured by its ability to bind OKT3-mIgG2a in a functional ELISA.

## Purity

> $95 \%$ as determined by SDS-PAGE

## Endotoxin

< 1.0 EU per $\mu \mathrm{g}$ of the protein as determined by the LAL method

## Stability

Samples are stable for up to twelve months from date of receipt at $-70^{\circ} \mathrm{C}$

## Predicted $\mathbf{N}$ terminal

Asp 23 \& Gln 23

## Molecular Mass

The recombinant heterodimer of human CD3E/CD3G comprises 683 (355+328) amino acids and has a calculated molecular mass of 77.2 $(40.1+37.1) \mathrm{KDa}$. As a result of glycosylation, the apparent molecular mass of human CD3E/CD3G heterodimer is approximately 42-47 KDa in SDSPAGE under reducing conditions.

## Formulation

Lyophilized from sterile PBS, pH 7.4.

1. $5 \%$ trehalose and mannitol are added as protectants before lyophilization.
2. Please contact us for any concerns or special requirements.

## Usage Guide

## Storage

Store it under sterile conditions at $-20^{\circ} \mathrm{C}$ to $-80^{\circ} \mathrm{C}$. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

## Reconstitution

Adding sterile water, prepare a stock solution of $0.25 \mathrm{mg} / \mathrm{ml}$. Concentration is measured by UV-Vis.

SDS-PAGE


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Human CD3E \& CD3G Heterodimer Protein SDS- PAGE

