

# **Biotinylated Recombinant Human CD3E&CD3G Protein**

Catalog No.: RP00591B Recombinant

# **Sequence Information**

 Species
 Gene ID
 Swiss Prot

 Human
 916&917
 P07766(CD3

 E)&P09693(CD3G)
 D3G)

**Tags** C-hFc&Avi

**Synonyms** 

CD3; CD3G; CD3g; T3G; CD3e; CD3E; CD3 epsilon&CD3 gamma; CD3E&CD3G

# **Product Information**

Source

**Purification** 

HEK293 cells

≥ 95 % as determined by SDS-PAGE;≥ 95 % as determined by HPLC.

#### Calculated MW Observed MW

40 kDa (CD3E), 36.5 48-55 kDa kDa (CD3G)

### **Endotoxin**

< 1 EU/µg of the protein by LAL method.

#### **Formulation**

Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.

#### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

# Contact

### 2

400-999-6126

# **Background**

T-cell surface glycoprotein CD3 epsilon&CD3 gamma chain, also known as CD3E&CD3G , are single-pass type I membrane proteins. When antigen presenting cells (APCs) activate T-cell receptor (TCR), TCR-mediated signals are transmitted across the cell membrane by the CD3 chains CD3D, CD3E, CD3G and CD3Z. All CD3 chains contain immunoreceptor tyrosine-based activation motifs (ITAMs) in their cytoplasmic domain.

### **Basic Information**

#### **Description**

Biotinylated Recombinant Human CD3E&CD3G/CD3 epsilon&CD3 gamma Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Asp23-Asp126(CD3E) & Gln23-Ser116(CD3G)) of Human CD3E&CD3G/CD3 epsilon&CD3 gamma (Accession #P07766(CD3E)&P09693(CD3G)) fused with a C-hFc&Avi tag at the C-terminus.

#### **Bio-Activity**

#### Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

### Storage

Store at  $-20^{\circ}$ C. Store the lyophilized protein at  $-20^{\circ}$ C to  $-80^{\circ}$ C up to 1 year from the date of receipt.

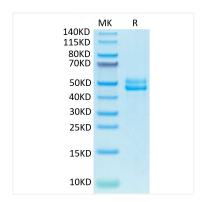
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

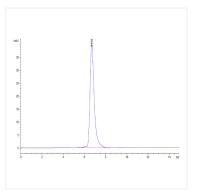
# **Operational Notes**

For your safety and health, please wear a lab coat and disposable gloves for handling.

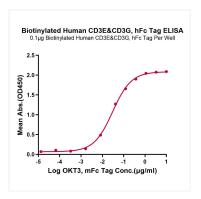
# **Validation Data**



Biotinylated Recombinant Human CD3E&CD3G Protein was determined by Tris-Bis PAGE under reducing conditions.



The purity of Biotinylated Human CD3E&CD3G is greater than 95% as determined by SEC-HPLC.



Immobilized Biotinylated Human CD3E&CD3G, hFc Tag at 1  $\mu$ g/mL (100  $\mu$ L/Well) on streptavidin (5  $\mu$ g/mL) precoated plate. Dose response curve for OKT3, mFc Tag with the EC $_{50}$  of 30.3ng/mL determined by ELISA.