

# Recombinant Cynomolgus CD3E & CD3G protein, Fc-tagged

**Cat. No.** CD3E&CD3G-222C    **Lot. No.** (See product label)

## SPECIFICATION

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b>     | Recombinant Cynomolgus CD3E(Met1-Asp117) & CD3G(Met1-Thr113) protein was fused to Fc region of Llama IgG2b at the C-terminus and expressed in HEK293 cells.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Species</b>              | Cynomolgus                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Source</b>               | HEK293                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>ProteinLength</b>        | 685                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Description</b>          | Part of the TCR-CD3 complex present on T-lymphocyte cell surface that plays an essential role in adaptive immune response. 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. Upon TCR engagement, these motifs become phosphorylated by Src family protein tyrosine kinases LCK and FYN, resulting in the activation of downstream signaling pathways. In addition of this role of signal transduction in T-cell activation, CD3E plays an essential role in correct T-cell development. Initiates the TCR-CD3 complex assembly by forming the two heterodimers CD3D/CD3E and CD3G/CD3E. Participates also in internalization and cell surface down-regulation of TCR-CD3 complexes via endocytosis sequences present in CD3E cytosolic region. |
| <b>Predicted N Terminal</b> | Gln22 & Gln23                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Form</b>                 | Lyophilized from sterile PBS, pH 7.4.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                       |                                                                                                                                                                                                                                                              |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       | Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.                                                                                                                                                         |
| <b>Molecular Mass</b> | The recombinant cynomolgus CD3E/CD3G consists of 685 (345+340) amino acids and has a calculated molecular mass of 77.3 (38.8+38.5) KDa.                                                                                                                      |
| <b>Endotoxin</b>      | <0.01 EU per µg of the protein as determined by the LAL method.                                                                                                                                                                                              |
| <b>Purity</b>         | >95% as determined by SDS-PAGE.                                                                                                                                                                                                                              |
| <b>Stability</b>      | Samples are stable for up to twelve months from date of receipt at -20 centigrade to -80 centigrade.                                                                                                                                                         |
| <b>Storage</b>        | Store it under sterile conditions at -20 centigrade to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.                                                                               |
| <b>Shipping</b>       | In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature.<br>Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise. |

## GENE INFORMATION

|                        |                  |
|------------------------|------------------|
| <b>Gene Name</b>       | CD3E             |
| <b>Official Symbol</b> | CD3E             |
| <b>Synonyms</b>        | IMD18; T3E; TCRE |
| <b>Gene ID</b>         | 102133065        |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

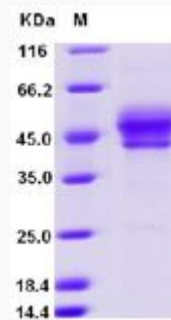
 45-1 Ramsey Road, Shirley, NY 11967, USA

mRNA Refseq [NM\\_001283615.1](#)

Protein Refseq [NP\\_001270544.1](#)

UniProt ID [Q95LI5](#)

SDS-PAGE of  
CD3E&CD3G-222C



Tel: 1-631-559-9269 1-516-512-3133

Email: [info@creative-biomart.com](mailto:info@creative-biomart.com) Fax: 1-631-938-8127

45-1 Ramsey Road, Shirley, NY 11967, USA