Recombinant Cynomolgus CD3E & CD3G protein, Fc-tagged

Cat. No. CD3E&CD3G-221C **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Cynomolgus CD3E(Met1-Asp117) & CD3G(Met1-Thr113) protein was fused to Fc region of human IgG1 at the C-terminus and expressed in HEK293 cells.
Species	Cynomolgus
Source	HEK293
ProteinLength	663
Description	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.
Predicted N Terminal	Gln22 & Gln23
Form	Lyophilized from sterile PBS, pH 7.4.

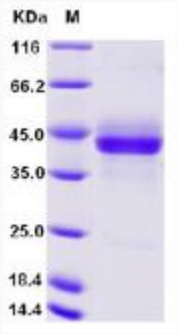
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Molecular Mass	The recombinant cynomolgus CD3E/CD3G consists of 663 (334+329) amino acids and has a calculated molecular mass of 74.9 (37.6+37.3) KDa.
Endotoxin	<1.0 EU per μg of the protein as determined by the LAL method.
Purity	>95% as determined by SDS-PAGE.
Stability	Samples are stable for up to twelve months from date of receipt at -20 centigrade to -80 centigrade.
Storage	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.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

GENE INFORMATION

Gene Name	CD3E
Official Symbol	CD3E
Synonyms	IMD18; T3E; TCRE
Gene ID	102133065

Tel: 1-631-559-9269 1-516-512-3133
Email: 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-221C	

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA