

Recombinant Protein Technical Manual Recombinant Cynomolgus CD3e/CD3e Protein (Fc Tag) RPES2899

## Product Data:

Product SKU: RPES2899

**Size:** 10µg

Species: Cynomolgus

Expression host: Human Cells

Uniprot: Q95LI5

# **Protein Information:**

Molecular Mass:	38 kDa
AP Molecular Mass:	38-55 kDa
Tag:	C-Fc
Bio-activity:	
Purity:	> 95% as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per $\mu g$ as determined by the LAL method.
Storage:	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from a 0.2 $\mu$ m filtered solution of 50 mM Tris, 100 mM Glycine, pH 7.5.
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	CD3 epsilon; CD3e antigen; CD3e antigen, epsilon polypeptide (TiT3 complex); CD3e molecule, epsilon (CD3-TCR complex); CD3e; CD3-epsilon; FLJ18683; T3E; T- cell antigen receptor complex, epsilon subunit of T3; T-cell surface antigen T3/Leu- 4 epsilon chain; T-cell surface glycoprotein CD3 epsilon chain; TCRE

## **Immunogen Information:**

#### Sequence: Gln22-Asp117

#### Background:

T-cell surface glycoprotein CD3 epsilon chain, also known as CD3E, is a single-pass type I membrane protein. CD3E contains 1 Ig-like (immunoglobulin-like) domain and 1 ITAM domain. CD3E, together with CD3-gamma, CD3-delta and CD3-zeta, and the T-cell receptor alpha/beta and gamma/delta heterodimers, forms the T cell receptor-CD3 complex. The CD3 epsilon subunit of the T cell receptor (TCR) complex contains two defined signaling domains, a proline-rich sequence and an immune tyrosine activation motifs (ITAMs), and this complex undergoes a conformational change upon ligand binding that is thought to be important for the activation of T cells. T cell receptor-CD3 complex plays an important role in coupling antigen recognition to several intracellular signal-transduction pathways. This complex is critical for T-cell development and function, and represents one of the most complex transmembrane receptors. CD3E plays an essential role in T-cell development, and defects in CD3E gene cause severe immunodeficiency. Homozygous mutations in CD3D and CD3E genes lead to a complete block in T-cell development and thus to an early-onset severe combined immunodeficiency phenotype.