

## Product datasheet for **TP727837**

### CD3E Cynomolgus Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant Cynomolgus Colony CD3E (C-Fc)
Species:	Cynomolgus
Expression cDNA Clone or AA Sequence:	Gln22-Asp117
Tag:	C-Fc
Buffer:	Lyophilized from a 0.2 um filtered solution of 50 mM Tris-HCl, 100 mM Glycine, pH7.5.
Note:	Recombinant Cynomolgus monkey T-cell surface glycoprotein CD3 epsilon chain is produced by our Mammalian expression system and the target gene encoding Gln22-Asp117 is expressed with a Fc tag at the C-terminus.
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.
Stability:	12 months from date of despatch
Locus ID:	102133065
UniProt ID:	<a href="#">Q95LI5</a>
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



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**Summary:**

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.