

Synonym

FLJ18683,T3E,TCRE,CD3E,CD3-epsilon

SourceCynomolgus CD3 epsilon, His Tag (CDE-C5226) is expressed from human 293 cells (HEK293). It contains AA Gln 22 - Asp 117 (Accession # [Q95LI5-1](#)).

Predicted N-terminus: Gln 22

Molecular Characterization

CD3 epsilon(Gln 22 - Asp 117) Q95LI5-1	Poly-his
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This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 12.2 kDa. The protein migrates as 13-20 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

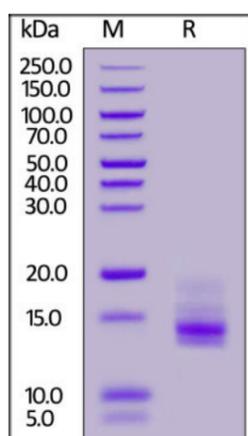
*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.***Storage**

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

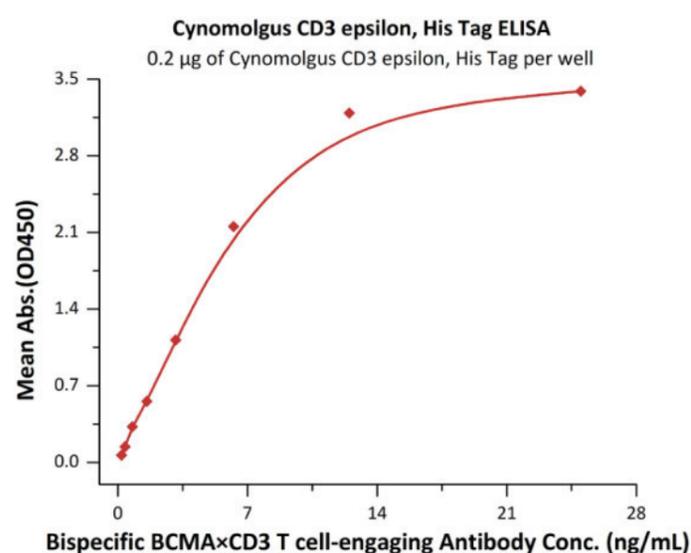
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

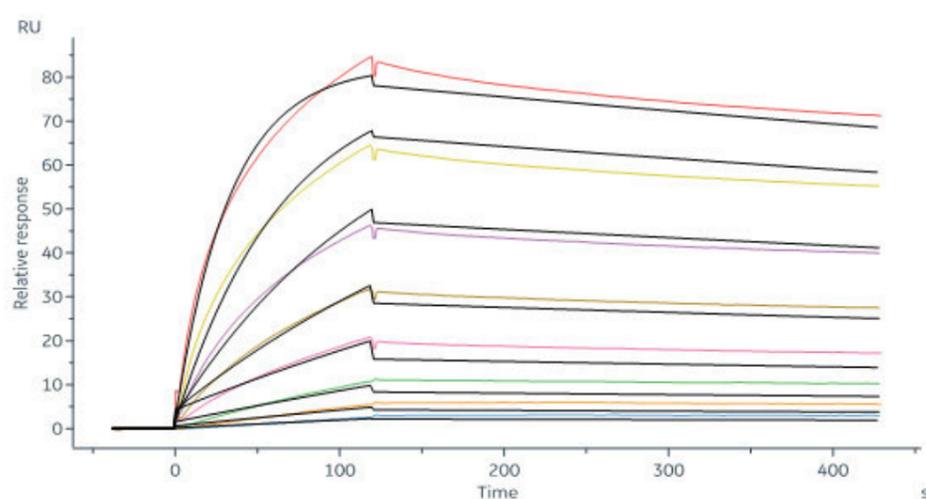
Cynomolgus CD3 epsilon, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



Immobilized Cynomolgus CD3 epsilon, His Tag (Cat. No. [CDE-C5226](#)) at 2 µg/mL (100 µL/well) can bind Bispecific BCMA×CD3 T cell-engaging Antibody (Cat. No. CDA-H52Hb) with a linear range of 0.4-6 ng/mL (QC tested).

Bioactivity-SPR



Cynomolgus CD3 epsilon, His Tag (Cat. No. CDE-C5226) immobilized on CM5 Chip can bind Bispecific T-cell Engager (CD3 X BCMA) with an affinity constant of 1.78 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

CD3e molecule, epsilon is also known as CD3E, is a T-cell surface single-pass type I membrane glycoprotein. 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. This complex plays an important role in coupling antigen recognition to several intracellular signal-transduction pathways. The genes encoding the epsilon, gamma and delta polypeptides are located in the same cluster on chromosome 11. The epsilon polypeptide plays an essential role in T-cell development. CD3E plays an essential role in T-cell development, and defects in CD3E gene cause severe immunodeficiency. CD3E gene has also been linked to a susceptibility to type I diabetes in women. CD3E has been shown to interact with TOP2B, CD3EAP and NCK2.

References

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.