

Source

Biotinylated Anti-Human CD3 Antibody, Mouse IgG2a,Avitag (Clone: OKT3), premium grade is a chimeric monoclonal antibody recombinantly expressed from human 293 cells (HEK293), which combines the variable region of a mouse monoclonal antibody. The mouse monoclonal antibody is produced from a hybridoma resulting from fusion of SP2/0 myeloma and B-lymphocytes obtained from a mouse immunized with CD3 epsilon.

It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.

Isotype

Mouse IgG2a/kappa

Specificity

This product is a specific antibody specifically reacts with CD3 epsilon.

Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

Endotoxin

Less than 0.002 EU per µg by the LAL method.

Sterility

The sterility testing was performed by membrane filtration method.

Mycoplasma

Negative.

Formulation

Supplied as 0.2 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Shipping

This product is supplied and shipped as sterile liquid solution with dry ice, please inquire the shipping cost.

Storage

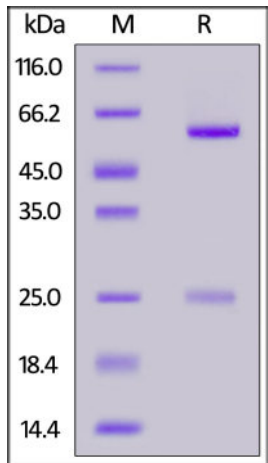
For long term storage, the product should be stored at liquid state at -70°C.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

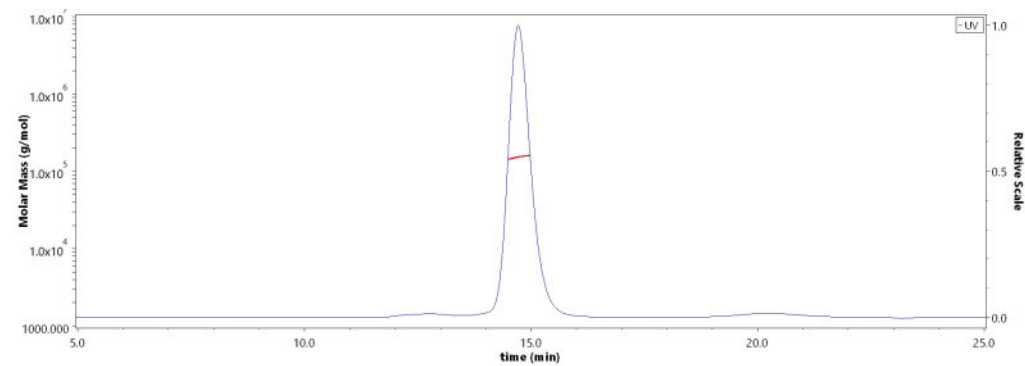
- 70°C for 24 months.

SDS-PAGE



Biotinylated Anti-Human CD3 Antibody, Mouse IgG2a,Avitag (Clone: OKT3), premium grade on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

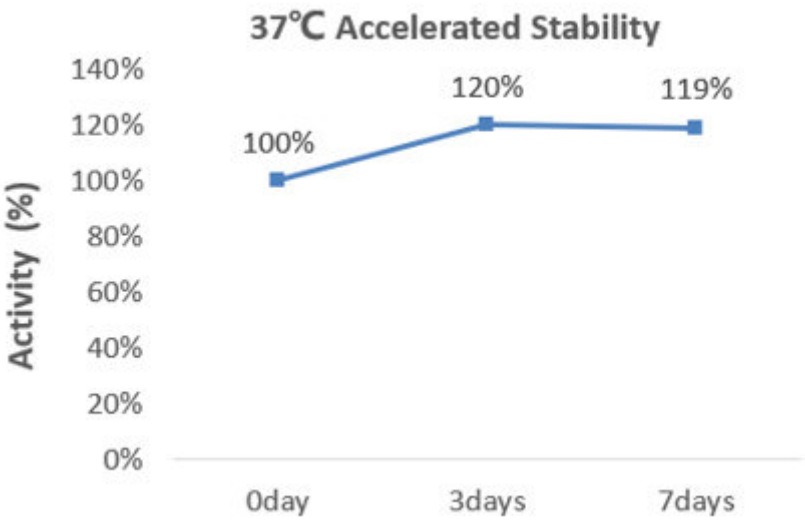
SEC-MALS



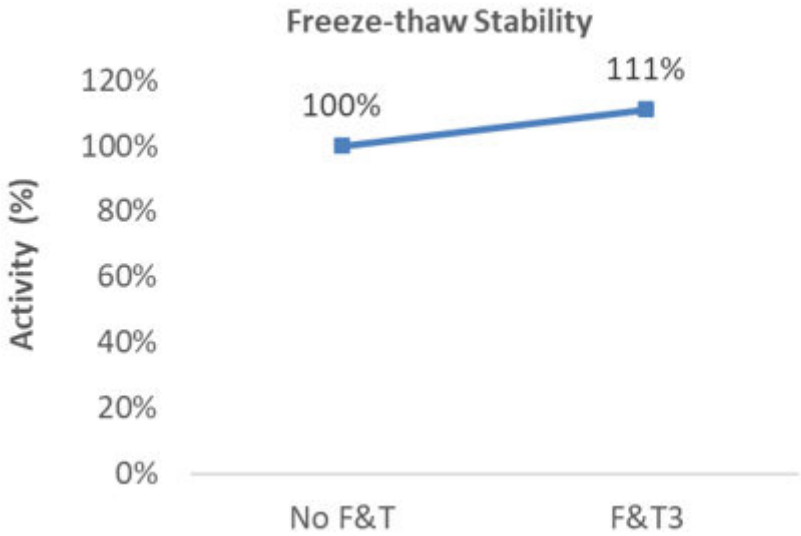
The purity of Biotinylated Anti-Human CD3 Antibody, Mouse IgG2a,Avitag (Clone: OKT3), premium grade (Cat. No. CDE-M525a) is more than 95% and the molecular weight of this protein is around 140-160 kDa verified by SEC-MALS.

[Report](#)

Bioactivity-Stability

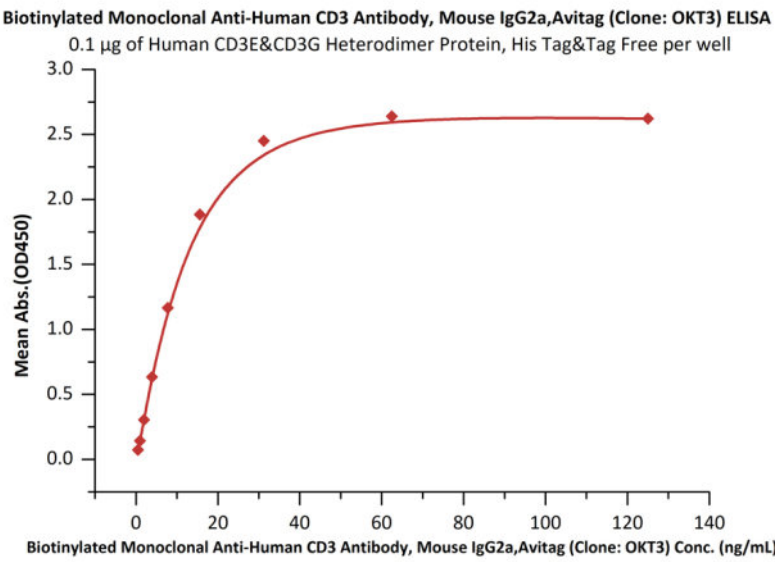


The Elisa assay shows that Biotinylated Anti-Human CD3 Antibody, Mouse IgG2a,Avitag (Clone: OKT3), premium grade (Cat. No. CDE-M525a) is stable at 37°C for 7 days.



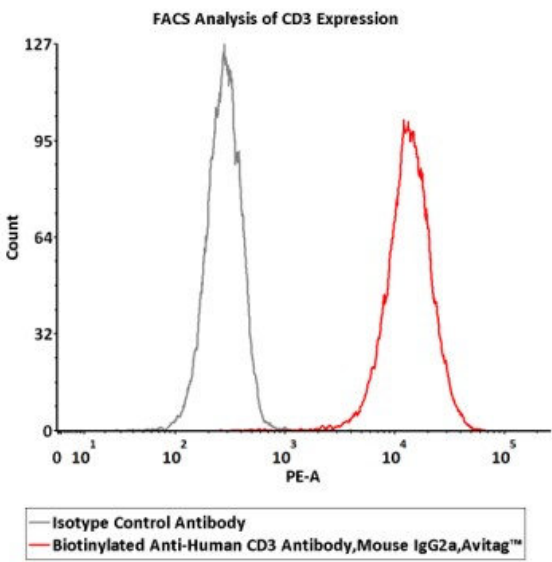
The Elisa assay shows that Biotinylated Anti-Human CD3 Antibody, Mouse IgG2a,Avitag (Clone: OKT3), premium grade (Cat. No. CDE-M525a) is stable after freezing and thawing three times.

Bioactivity-Elisa



Immobilized Human CD3E&CD3G Heterodimer Protein, His Tag&Tag Free (Cat. No. CDG-H52W5) at 1 µg/mL (100 µL/well) can bind Biotinylated Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a,Avitag (Clone: OKT3) (Cat. No. CDE-M525a) with a linear range of 2-16 ng/mL (QC tested).

Bioactivity-FACS



5e5 of Jurkat cells were stained with 100 µL of 1 µg/mL of Biotinylated Anti-Human CD3 Antibody, Mouse IgG2a,Avitag (Clone: OKT3), premium grade (Cat. No. CDE-M525a) and isotype control antibody respectively, washed and then followed by PE-SA and analyzed with FACS (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.

Clinical and Translational Updates

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