Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (Clone: OKT3), premium grade (HEK)

Catalog # CDE-M120a

Source

Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (Clone: OKT3), premium grade (CDE-M120a) is recombinantly produced from human 293 cells (HEK293).

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.

GMP-MC0323 is the GMP version of this CDE-M120a. These two proteins display indistinguishable performance profiles, thereby ensuring a seamless transition for end users from early preclinical stag to later clinical phases.

Isotype

Mouse IgG2a | Mouse Kappa

Conjugate

Unconjugated

Specificity

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

Endotoxin

Less than 0.002 EU per μg by the LAL method / rFC method.

Protein A

<5 ppm of protein tested by ELISA.

Host Cell Protein

<0.5 ng/μg of protein tested by ELISA.

Host Cell DNA

<0.02 ng/μg of protein tested by qPCR.

Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-HPLC.

Sterility

Negative

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 with dry ice, please inquire the shipping cost.

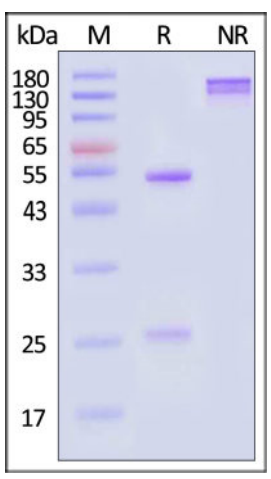
Storage

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

This product is stable after storage at:

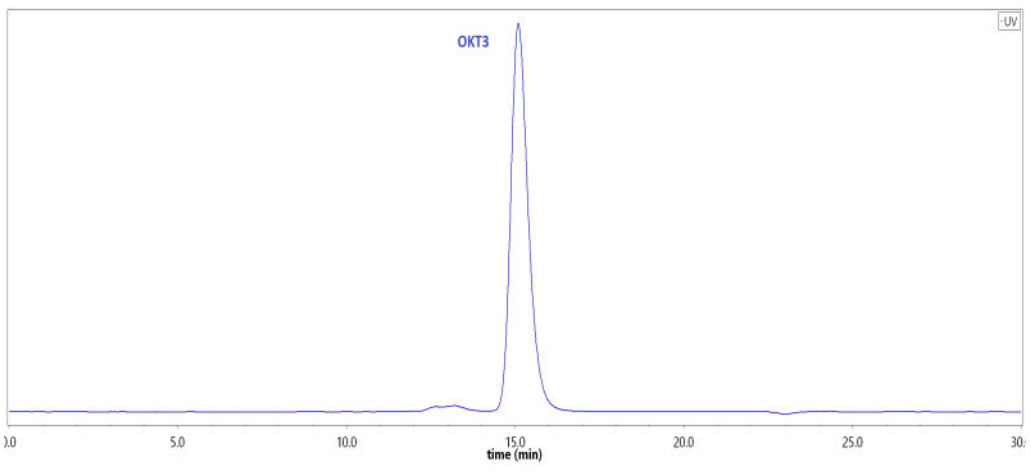
- 2-8°C for 12 months under sterile condition;
- -70°C for 24 months.

SDS-PAGE



Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (Clone: OKT3), premium grade on SDS-PAGE under reducing (R) and non-reducing (NR)

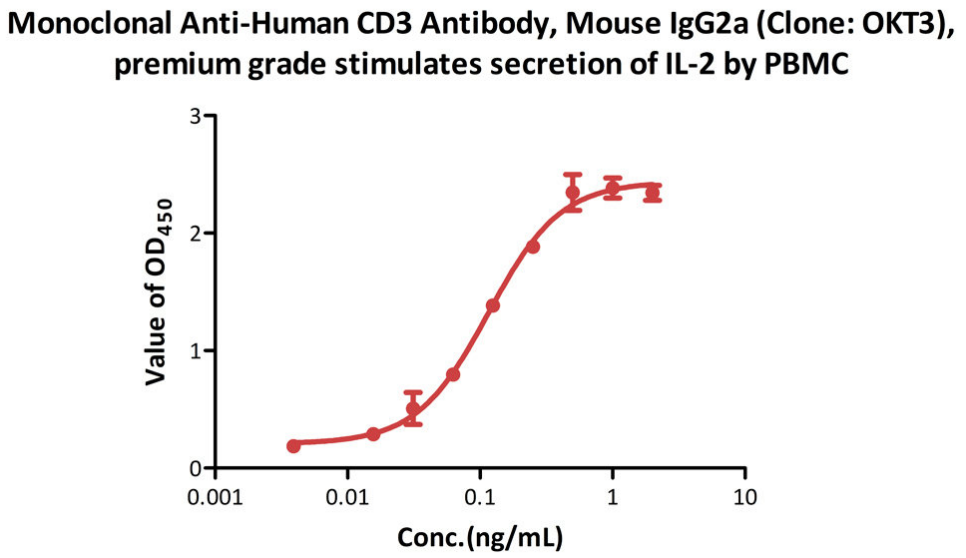
SEC-HPLC



The purity of Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (Clone: OKT3), premium grade(Cat. No. CDE-M120a) was greater than 95% as determined by SEC-HPLC.

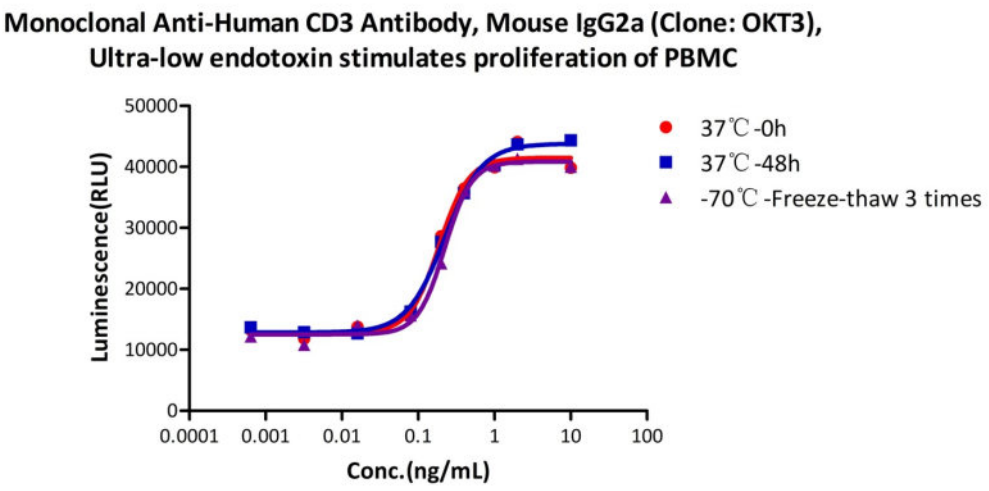
conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

Bioactivity-CELL BASE

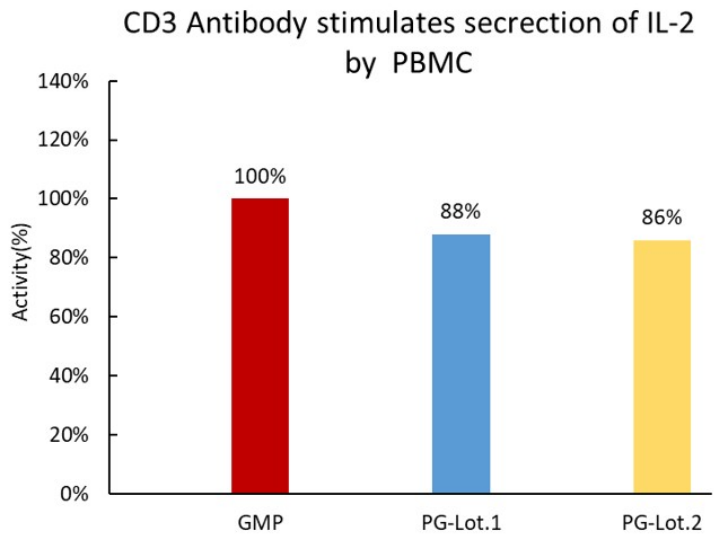


Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (Clone OKT3), premium grade (Cat. No. CDE-M120a) stimulates secretion of IL-2 by PBMC stimulated with 10 ng/mL Monoclonal Anti-Human CD28 Antibody, Mouse IgG1. The typically EC50 for this effect is 0.12 ng/mL (QC tested).

Bioactivity-Stability



The Cell based assay shows that Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (Clone: OKT3), Ultra-low endotoxin (Cat. No. CDE-M120a) is stable at 37°C for 48 hours and after freezing and thawing 3 times.



The Cell based assay shows batch-to-batch consistency between Acro's GMP and PG CD3 Antibody.

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.