Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (Clone: OKT3), Research Grade (HEK)

Catalog # CDE-C15DGN

Features and Advantages

- Native Conformation: Native sequences, tag-free and natural function.
- Reliable Activity: Biological activity calibrated against WHO/NIBSC standards.
- Stringent Quality Control: Protein content, purity, and cell-based bioactivity testing for each batch.
- Lowest Endotoxin level (<0.01 EU/ug).
- Safety Assurance: Sterile filtration through 0.2 μm membrane.
- AOF: Animal origin-free raw materials throughout the production process.

Source

Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (Clone: OKT3), Research Grade (CDE-C15DGN) is recombinantly produced from human 293 cells (HEK293).

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.

Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-HPLC.

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.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

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

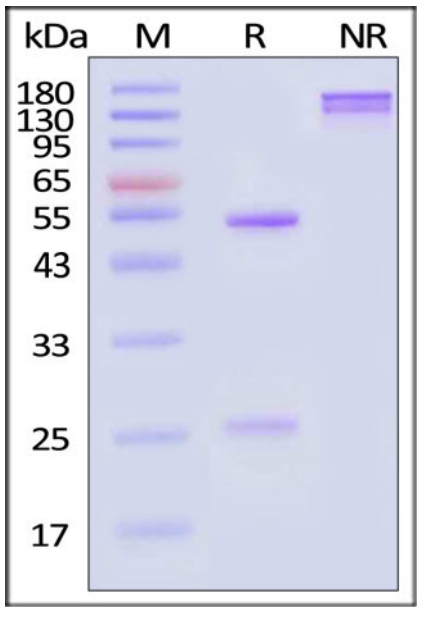
ACRO Quality Management System

- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

Quality Description

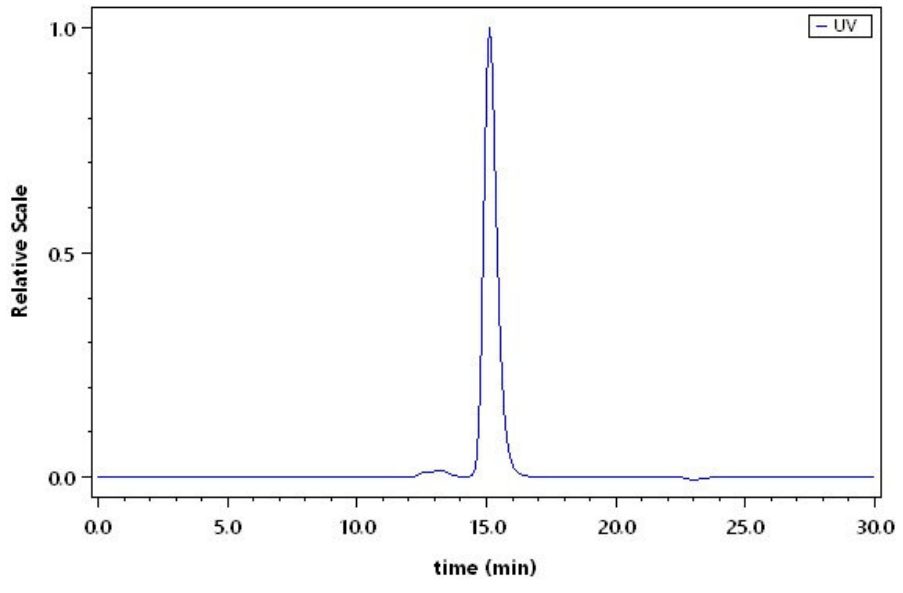
ACRO's Research-grade products are suitable for a wide range of cell culture applications, particularly for research use in academic institutions. These products are sterilized by filtration, followed by lyophilization where applicable. Typical specifications include endotoxin levels of <0.01 EU/μg and purities >95%. Biological activity is calibrated against WHO/NIBSC standards when available.
ACRO's Premium-grade (Pre-GMP) products are characterized by their high quality and enhanced safety profiles, making them ideal for early-stage discovery and manufacturing processes in cell therapy companies. A key advantage is their seamless transition to corresponding GMP-grade versions. Biological activity is calibrated against WHO/NIBSC standards when available. Typical specifications include endotoxin levels of <0.01 EU/μg and purities >95%. In addition, rigorous testing is conducted to ensure the absence of mycoplasma, HCD, and HCP, thereby guaranteeing product safety.

SDS-PAGE



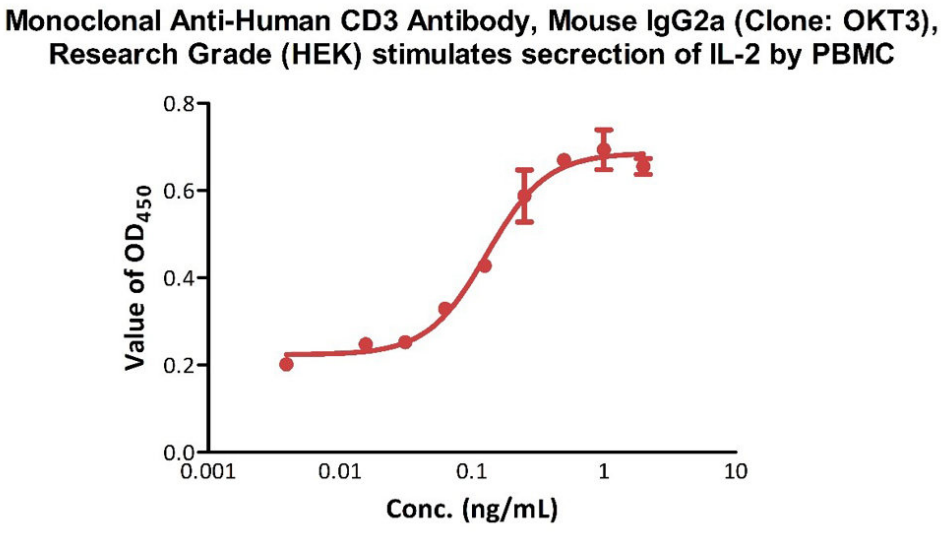
Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (Clone: OKT3), Research Grade on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

SEC-HPLC



The purity of Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (Clone: OKT3), Research Grade (Cat. No. CDE-C15DGN) was greater than 95% as determined by SEC-HPLC.

Bioactivity-CELL BASE



Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (Clone: OKT3), Research Grade (Cat. No. CDE-C15DGN) stimulates secretion of IL-2 by PBMC stimulated with 10 ng/mL Monoclonal Anti-Human CD28 Antibody, Mouse IgG1. The typical EC50 for this effect is 0.1302 ng/mL (QC 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.