# PE-Labeled Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (Clone: OKT3)Star Staining





#### Source

PE-Labeled Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (OKT3) is produced via conjugation of PE to Anti-Human CD3 Antibody, Mouse IgG2a (OKT3) under optimal conditions with a new generation site-specific technology under Star Staining labeling platform.

# **Application**

Flow Cytometry (Detection the expression of CD3 on Human cells).

Clone

OKT3

**Species** 

Mouse

**Isotype** 

Mouse IgG2a/kappa

**Specificity** 

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

Reactivity

Human

Immunogen

Purified Human CD3ε Protein.

Conjugate

PE

Excitation Wavelength: 488 nm / 561 nm

Emission Wavelength: 575 nm

# **Isotype Control**

The Isotype control is sold separately and you can search for Cat. No. <u>DNP-PM487</u> for product information.

# **Recommended Dilution**

1:50

#### **Formulation**

Lyophilized from  $0.22~\mu m$  filtered solution in PBS, 0.03% Proclin 300, pH7.4 with trehalose as protectant.

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**

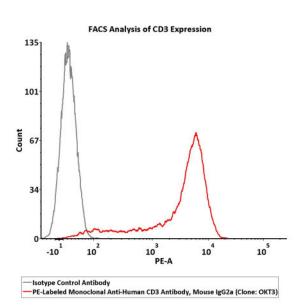
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please protect from light and 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 12 months after reconstitution;
- 2-8°C for 12 months after reconstitution.

# **Bioactivity-FACS**





# PE-Labeled Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (Clone: OKT3)Star Staining

Catalog # CDE-PCFP1



Flow cytometric analysis of Jurkat cells staining with PE-Labeled Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (Clone: OKT3) (Cat. No. CDE-PCFP1) at 1:50 dilution (2 $\mu$ L of the antibody stock solution corresponds to labeling of 1e6 cells in a final volume of 100  $\mu$ L), compared with isotype control antibody. PE signal was used to evaluate the binding activity (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, 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**

