Catalog # CDE-M531



#### Source

Monoclonal Anti-Human CD3 Antibody, Mouse IgG1 (SP34-2) is a monoclonal antibody recombinantly expressed from human 293 cells (HEK293), which provides higher batch consistency and long term security of supply.

#### Application

ELISA (Evaluation of levels of CD3 epsilon protein). Flow Cytometry (Evaluation of an epitope within the extracellular domain of CD3 epsilon protein).

#### Clone

SP34-2

### Species

Mouse

#### Isotype

Mouse lambda

## Specificity

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

#### Reactivity

Human

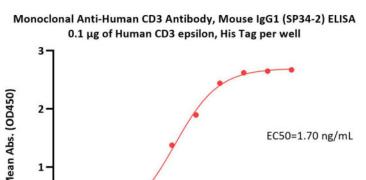
#### Immunogen

Purified Human CD3E Protein.

#### Conjugate

Unconjugated

# **Bioactivity-ELISA**



# Formulation

Lyophilized from 0.22  $\mu m$  filtered solution in PBS, 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.

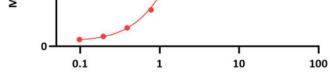
#### Storage

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

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 24 months in lyophilized state;
- -70°C for 12 months under sterile conditions after reconstitution.



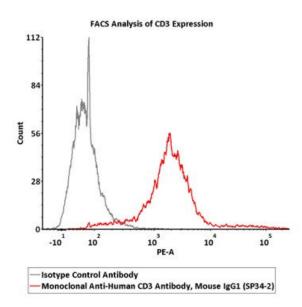
Monoclonal Anti-Human CD3 Antibody, Mouse IgG1 (SP34-2) Conc. (ng/mL)



Catalog # CDE-M531

Immobilized Human CD3 epsilon, His Tag (Cat. No. CDE-H5223) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Monoclonal Anti-Human CD3 Antibody, Mouse IgG1 (SP34-2) (Cat. No. CDE-M531) with a linear range of 0.4-6 ng/mL (QC tested).

# **Bioactivity-FACS**



2e5 of Jurkat cells were stained with 100  $\mu$ L of 10  $\mu$ g/mL of Monoclonal Anti-Human CD3 Antibody, Mouse IgG1 (SP34-2) (Cat. No. CDE-M531) and isotype control antibody respectively, washed and then followed by PE-anti mouse IgG1 antibody 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, 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**





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