

## CD3 monoclonal antibody, clone MEM-57 (PE)

Catalog # MAB4618

Size 100 Reactions

### Specification

<b>Product Description</b>	Mouse monoclonal antibody raised against native CD3.
<b>Immunogen</b>	Native purified CD3 from human thymocytes and T lymphocytes.
<b>Host</b>	Mouse
<b>Reactivity</b>	Human
<b>Specificity</b>	This antibody reacts with gamma-epsilon and delta-epsilon dimers of human CD3 complex, a part of a bigger multisubunit T cell receptor complex (CD3/TCR) expressed on peripheral blood T lymphocytes and mature thymocytes.
<b>Form</b>	Liquid
<b>Conjugation</b>	PE
<b>Isotype</b>	IgG2a
<b>Recommend Usage</b>	Flow Cytometry (20 ul in human blood cells 100 ul in whole blood or $10^6$ cells in a suspension) The optimal working dilution should be determined by the end user.
<b>Storage Buffer</b>	In PBS (0.2% BSA, 0.09% sodium azide)
<b>Storage Instruction</b>	Store in the dark at 4°C. Do not freeze. Avoid prolonged exposure to light. Aliquot to avoid repeated freezing and thawing.
<b>Note</b>	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

### Applications

- Flow Cytometry

## Gene Info — CD3D

Entrez GeneID	<a href="#">915</a>
Gene Name	CD3D
Gene Alias	CD3-DELTA, T3D
Gene Description	CD3d molecule, delta (CD3-TCR complex)
Omim ID	<a href="#">186790 600802</a>
Gene Ontology	<a href="#">Hyperlink</a>
Gene Summary	The protein encoded by this gene is part of the T-cell receptor/CD3 complex (TCR/CD3 complex) and is involved in T-cell development and signal transduction. The encoded membrane protein represents the delta subunit of the CD3 complex, and along with four other CD3 subunits, binds either TCR alpha/beta or TCR gamma/delta to form the TCR/CD3 complex on the surface of T-cells. Defects in this gene are a cause of severe combined immunodeficiency autosomal recessive T-cell-negative/B-cell-positive/NK-cell-positive (SCIDBNK). Two transcript variants encoding different isoforms have been found for this gene. Other variants may also exist, but the full-length nature of their transcripts has yet to be defined. [provided by RefSeq]
Other Designations	CD3D antigen, delta polypeptide CD3d antigen, delta polypeptide (TiT3 complex) T-cell receptor T3 delta chain T-cell surface glycoprotein CD3 delta chain

## Gene Info — CD3E

Entrez GeneID	<a href="#">916</a>
Gene Name	CD3E
Gene Alias	FLJ18683, T3E, TCRE
Gene Description	CD3e molecule, epsilon (CD3-TCR complex)
Omim ID	<a href="#">186830</a>
Gene Ontology	<a href="#">Hyperlink</a>
Gene Summary	The protein encoded by this gene is the CD3-epsilon polypeptide, which together with CD3-gamma, -delta and -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. Defects in this gene cause immunodeficiency. This gene has also been linked to a susceptibility to type I diabetes in women. [provided by RefSeq]

#### Other Designations

CD3-epsilon|CD3E antigen, epsilon polypeptide|CD3e antigen, epsilon polypeptide (TiT3 complex)|T-cell antigen receptor complex, epsilon subunit of T3|T-cell surface antigen T3/Leu-4 epsilon chain|T-cell surface glycoprotein CD3 epsilon chain

## Gene Info — CD3G

#### Entrez GeneID

[917](#)

#### Gene Name

CD3G

#### Gene Alias

CD3-GAMMA, FLJ17620, FLJ17664, FLJ79544, FLJ94613, MGC138597, T3G

#### Gene Description

CD3g molecule, gamma (CD3-TCR complex)

#### Omim ID

[186740](#)

#### Gene Ontology

[Hyperlink](#)

#### Gene Summary

The protein encoded by this gene is the CD3-gamma polypeptide, which together with CD3-epsilon, -delta and -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. Defects in this gene are associated with T cell immunodeficiency. [provided by RefSeq]

#### Other Designations

CD3G antigen, gamma polypeptide|CD3g antigen, gamma polypeptide (TiT3 complex)|T-cell antigen receptor complex, gamma subunit of T3|T-cell receptor T3 gamma chain|T-cell surface glycoprotein CD3 gamma chain

## Publication Reference

- [T-cell antigen-receptor stoichiometry: pre-clustering for sensitivity.](#)

Alarcon B, Swamy M, van Santen HM, Schamel WW.

EMBO Reports 2006 May; 7(5):490.

- [Therapeutic in vivo use of the A1-CD3 monoclonal antibody.](#)

I Hilgert, F Franěk, I Stefanová, J Kaslík, J Jirka, H Kristofová, P Rossmann, J Soucek, V Horejsi.

Transplantation 1993 Feb; 55(2):435.

- [Monoclonal antibodies against human leucocyte antigens. II. Antibodies against CD45 \(T200\), CD3 \(T3\), CD43, CD10 \(CALLA\), transferrin receptor \(T9\), a novel broadly expressed 18-kDa antigen \(MEM-43\) and a novel antigen of restricted expression \(MEM-74\).](#)

Horejsí V, Angelisová P, Bazil V, Kristofová H, Stoyanov S, Stefanová I, Hausner P, Vosecký M, Hilgert I.

Folia Biol (Praha) 1988 Jan; 34(1):23.

## Pathway

- [Hematopoietic cell lineage](#)
- [Hematopoietic cell lineage](#)
- [Hematopoietic cell lineage](#)
- [Primary immunodeficiency](#)
- [Primary immunodeficiency](#)
- [T cell receptor signaling pathway](#)
- [T cell receptor signaling pathway](#)
- [T cell receptor signaling pathway](#)

## Disease

- [Arthritis](#)
- [Asthma](#)
- [Cardiovascular Diseases](#)
- [Celiac Disease](#)
- [Celiac Disease](#)
- [Celiac Disease](#)
- [Depressive Disorder](#)
- [Diabetes Mellitus](#)

- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Inflammation](#)