

CD3 monoclonal antibody, clone UCHT1 (Biotin)

Catalog # MAB6004

Size 100 Reactions

Specification

Product Description	Mouse monoclonal antibody raised against native CD3.
Immunogen	Human peripheral blood lymphocytes from a patient with Sezary's syndrome and infant thymocytes.
Host	Mouse
Reactivity	Human
Specificity	Human CD3. The monoclonal antibody UCHT1 reacts with the 20 kDa epsilon chain of the CD3/TCR complex.
Form	Liquid
Conjugation	Biotin
Isotype	IgG1, kappa
Recommend Usage	Flow Cytometry (10 uL/10 ⁶ cells) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide).
Storage Instruction	Store at 4°C.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Immunohistochemistry (Frozen sections)
- Immunoprecipitation
- Flow Cytometry

Gene Info — CD3D

Entrez GeneID	915
Gene Name	CD3D
Gene Alias	CD3-DELTA, T3D
Gene Description	CD3d molecule, delta (CD3-TCR complex)
Omim ID	186790 600802
Gene Ontology	Hyperlink
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	916
Gene Name	CD3E
Gene Alias	FLJ18683, T3E, TCRE
Gene Description	CD3e molecule, epsilon (CD3-TCR complex)
Omim ID	186830
Gene Ontology	Hyperlink
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

Gene Info — CD247**Entrez GeneID**[919](#)**Gene Name**

CD247

Gene Alias

CD3-ZETA, CD3H, CD3Q, CD3Z, T3Z, TCRZ

Gene Description

CD247 molecule

Omim ID[186780 610163](#)**Gene Ontology**[Hyperlink](#)

Gene Summary

The protein encoded by this gene is T-cell receptor zeta, which together with T-cell receptor alpha/beta and gamma/delta heterodimers, and with CD3-gamma, -delta and -epsilon, forms the T-cell receptor-CD3 complex. The zeta chain plays an important role in coupling antigen recognition to several intracellular signal-transduction pathways. Low expression of the antigen results in impaired immune response. Two alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq]

Other Designations

CD247 antigen, zeta subunit|CD3Z antigen, zeta polypeptide (TiT3 complex)|OTTHUMP00000032544|T-cell antigen receptor complex, zeta subunit of CD3|T-cell receptor T3 zeta chain|T-cell receptor zeta chain|T-cell surface glycoprotein CD3 zeta chain

Publication Reference

- [Distinctive functional characteristics of human "T" lymphocytes defined by E rosetting or a monoclonal anti-T cell antibody.](#)

Beverley PC, Callard RE.

European Journal of Immunology 1981 Apr; 11(4):329.

Application: Flow Cyt, Human, Human cells from bone marrow, PBM, spleen, thymocytes, tonsil

Pathway

- [Hematopoietic cell lineage](#)
- [Hematopoietic cell lineage](#)
- [Hematopoietic cell lineage](#)
- [Natural killer cell mediated cytotoxicity](#)
- [Primary immunodeficiency](#)
- [Primary immunodeficiency](#)
- [T cell receptor signaling pathway](#)
- [T cell receptor signaling pathway](#)
- [T cell receptor signaling pathway](#)
- [T cell receptor signaling pathway](#)

Disease

- [Arthritis](#)
- [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](#)
- [Genetic Predisposition to Disease](#)
- [Hypertension](#)
- [Inflammation](#)
- [Lupus Erythematosus](#)
- [Osteoporosis](#)
- [Scleroderma](#)