

Human CD3 epsilon/CD3E antibody

Catalog Number: ATGA0331

PRODUCT INFORMATION

Catalog number

ATGA0331

Clone No.

AT3H3

Product type

Monoclonal Antibody

UnitProt No.

P07766

NCBI Accession No.

NP_000724

Alternative Names

T-cell surface glycoprotein CD3 epsilon chain, T3E, TCRE

PRODUCT SPECIFICATION

Antibody Host

Mouse

Reacts With

Human

Concentration

1mg/ml (determined by BCA assay)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

Immunogen

Recombinant human CD3E (23-126aa) purified from E. coli

Isotype

IgG1 kappa

Purification Note

By protein-A affinity chromatography

Application

ELISA, WB, ICC/IF, FACS

Usage

The antibody has been tested by ELISA, Western blot, ICC/IF and FACS analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

Human CD3 epsilon/CD3E antibody

Catalog Number: ATGA0331

Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

The T cell antigen receptor (TCR) recognizes foreign antigens and translates such recognition events into intracellular signals that elicit a change in the cell from a dormant to an activated state. Much of this signaling process can be attributed to a multi subunit complex of proteins that associates directly with the TCR. This complex has been designated CD3 (cluster of differentiation 3). It is composed of five invariant polypeptide chains that associate to form three dimers. 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.

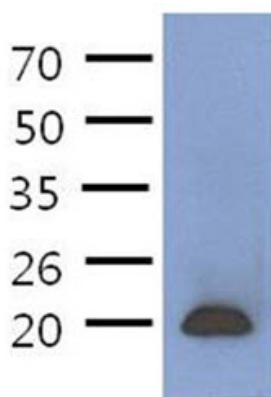
General References

Gold DP., et al. (1986) Nature 321(6068): 431-434.

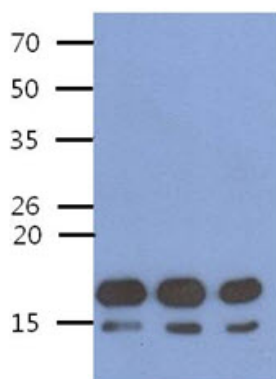
Soudais C., et al. (1993) Nat Genet 3(1):77-81.

DATA

Western blot analysis (WB)



The cell lysate of Jurkat (40ug) was resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human CD3E antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.



The Recombinant CD3E proteins (200, 100, 50ng) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human CD3E antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

Immunocytochemistry/Immunofluorescence (ICC/IF)

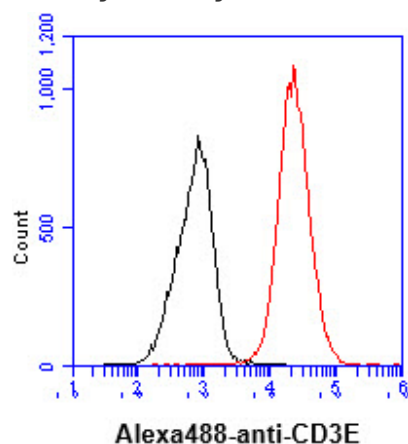
Human CD3 epsilon/CD3E antibody

Catalog Number: ATGA0331



ICC/IF analysis of CD3E in Jurkat cells. The cell was stained with ATGA0331 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

Flow cytometry (FACS)



Flow cytometry analysis of CD3E in Jurkat cell line, staining at 2-5ug for 1×10^6 cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).