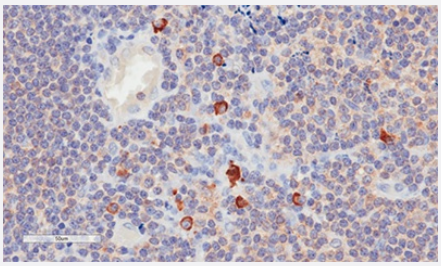
RecomAb™

CD3E monoclonal antibody, clone YTH 12.5

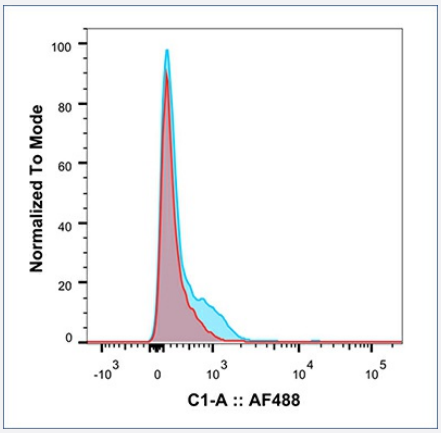
Catalog # RAB01082 Size 200 ug

Applications



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining of human tonsil tissue using CD3E monoclonal antibody, clone YTH 12.5 (Cat # RAB01082).
Immunohistochemical staining of paraffin embedded human tissue using the rabbit-chimeric antibody (Cat # RAB01082). Antigen retreival was acheived by microwaving in citrate buffer (pH 6), followed by blocking with protein block serum-free buffer. Primary antibody incubation with Cat # RAB01082 was carried out at 4 ug/mL for 30 minutes. Samples were then incubated with an anti-rabbit IgG HRP secondary antibody for 20 mins followed by DAB, and counter-staining with haemotoxylin. Strong membrane staining of T-cells at the periphery of the germinal centre and between follicles may be observed. Recommended concentration, 2-4 ug/mL.



Flow Cytometry

Flow cytometric analysis using CD3E monoclonal antibody, clone YTH 12.5 (Cat # RAB01082).
Rhesus monkey lymphocytes were stained with an isotype control (red) or the rabbit-chimeric antibody (Cat # RAB01082, blue) at a concentration of 1 ug/mL for 30 mins at RT. After washing, bound antibody was detected using a AF488 conjugated donkey anti-rabbit antibody and cells analysed on a FlowJo single-cell flow cytometer.

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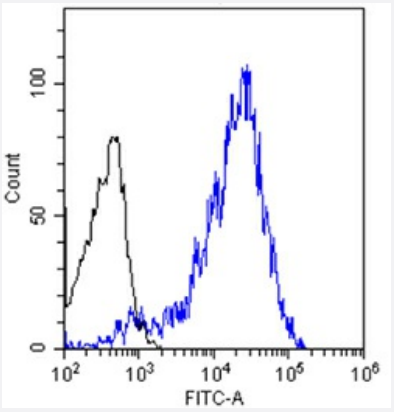
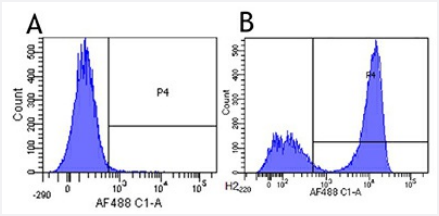


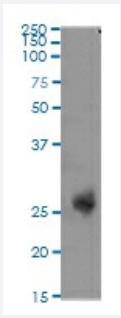
Flow Cytometry

Flow-cytometry using CD3E monoclonal antibody, clone YTH 12.5 (Cat # RAB01082).
Jurkat cells were stained with unimmunized rabbit IgG antibody (black line) or the rabbit-chimeric antibody (Cat # RAB01082, blue line) at a concentration of 10 ug/mL for 30 mins at RT. After washing, bound antibody was detected using anti-rabbit IgG JK (FITC-conjugate) antibody at 2 ug/mL and cells analyzed on a FACSCanto flow-cytometer.



Flow Cytometry

Flow-cytometry using CD3E monoclonal antibody, clone YTH 12.5 (Cat # RAB01082).
Human lymphocytes were stained with an isotype control (panel A) or the rabbit-chimeric antibody (Cat # RAB01082, panel B) at a concentration of 1 ug/mL for 30 mins at RT. After washing, bound antibody was detected using a AF488 conjugated donkey anti-rabbit antibody and cells analysed on a FACSCanto flow-cytometer.



Western Blot (Tissue lysate)

Western blot analysis of CD3E monoclonal antibody, clone YTH 12.5 (Cat # RAB01082).
Human spleen sample (35 ug protein in RIPA buffer) were resolved on a 10% SDS PAGE gel and blots probed with the chimeric rabbit antibody (Cat # RAB01082) at 0.3 ug/mL before detection using an anti-rabbit secondary antibody. A primary incubation of 1h was used and protein was detected by chemiluminescence. The expected band size for CD3E is 23.1 kDa. Cat # RAB01082 successfully detected human CD3E.

Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human CD3E.
Antibody Species	Rabbit
Immunogen	Originate antibody is raised against human CD3E.
Reactivity	Human
Specificity	This antibody reacts to CD3E.

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Form	Liquid
Preparation Method	Mammalian cell (HEK293) expression system
Purification	Protein A affinity purified
Isotype	Rabbit IgG, lambda
Recommend Usage	Flow Cytometry Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) Western Blot The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.02% Proclin 300)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.

Applications

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Gene Info — CD3E

Entrez GeneID	916
Protein Accession#	P07766
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

Pathway

- Hematopoietic cell lineage
- Primary immunodeficiency
- T cell receptor signaling pathway

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Disease

- Asthma
- Cardiovascular Diseases
- Celiac Disease
- Depressive Disorder
- Diabetes Mellitus
- Edema
- Genetic Predisposition to Disease
- Inflammation

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