

# CD3 Polyclonal antibody

Catalog Number: 17617-1-AP

Featured Product

94 Publications

## Basic Information

**Catalog Number:**

17617-1-AP

**Size:**

550 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG11797

**GenBank Accession Number:**

BC049847

**GeneID (NCBI):**

916

**ENSEMBL Gene ID:**

ENSG00000198851

**UNIPROT ID:**

P07766

**Full Name:**

CD3e molecule, epsilon (CD3-TCR complex)

**Calculated MW:**

207 aa, 23 kDa

**Observed MW:**

23-25 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:1000-1:8000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:500-1:2000

IF 1:50-1:500

## Applications

**Tested Applications:**

FC, IF-P, IHC, IP, WB, ELISA

**Cited Applications:**

WB, IHC, IF, FC, Cell treatment

**Species Specificity:**

human, pig, mouse, rat

**Cited Species:**

human, rat, mouse, pig

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB:** Jurkat cells, pig spleen tissue, MOLT-4 cells, mouse thymus tissue, rat thymus tissue

**IP:** Jurkat cells,

**IHC:** human tonsillitis tissue, mouse spleen tissue, human lymphoma tissue, human lung cancer tissue, human breast cancer tissue, mouse colon tissue, human pancreas cancer tissue, rat thymus tissue

**IF:** human tonsillitis tissue, mouse spleen tissue

## Background Information

CD3 is a complex of proteins that directly associates with the T cell receptor (TCR). The TCR/CD3 complex of T-lymphocytes consists of either a TCR alpha/beta or TCR gamma/delta heterodimer coexpressed at the cell surface with the invariant subunits of CD3 labeled gamma, delta, epsilon, zeta, and eta. The TCR recognizes antigens bound to major histocompatibility complex (MHC) molecules. TCR-mediated peptide-MHC recognition is transmitted to the CD3 complex, leading to the intracellular signal transduction. CD3 is considered to be a pan-T cell marker for detection of normal and neoplastic T cells. This anti-CD3 is a polyclonal antibody directed against the epsilon chain of human CD3 molecule.

## Notable Publications

Author	Pubmed ID	Journal	Application
Xiao Wu	36168732	Exp Dermatol	IHC
Lan Zhang	34586738	Clin Transl Med	IHC, FC
Rilin Deng	32963356	Cell Mol Immunol	IHC

## Storage

**Storage:**

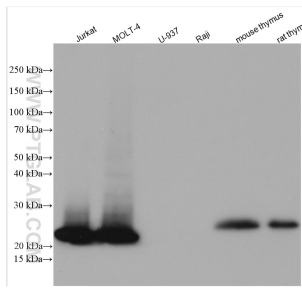
Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

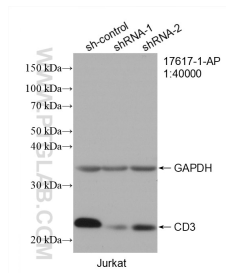
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

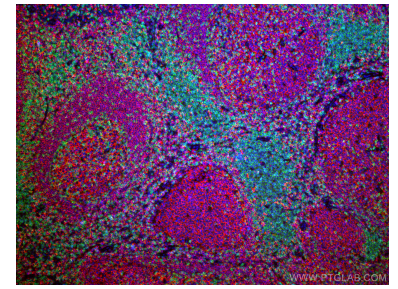
## Selected Validation Data



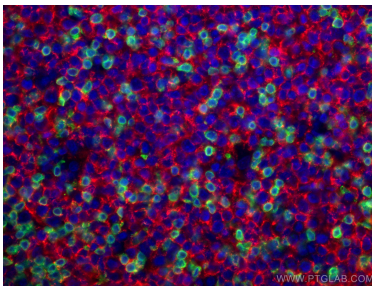
Jurkat cells (CD3+), MOLT-4 cells (CD3+), U-937 cells (CD3-), Raji cells (CD3-), mouse thymus tissue, and rat thymus tissue were subjected to SDS PAGE followed by western blot with 17617-1-AP (CD3 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



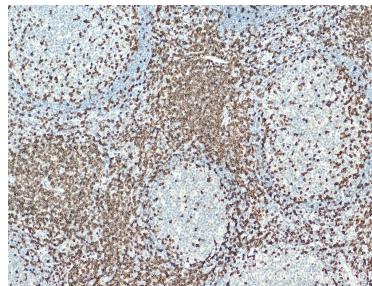
WB result of CD3 antibody (17617-1-AP; 1:40000; incubated at room temperature for 1.5 hours) with sh-Control and sh-CD3 transfected Jurkat cells.



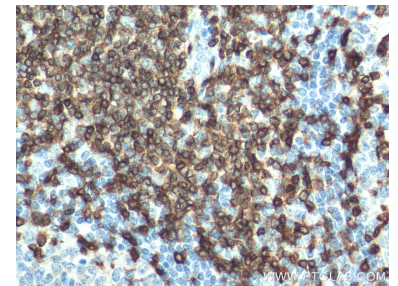
Immunofluorescent analysis of (4% PFA) fixed human tonsillitis tissue using CD3 antibody (17617-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CD20 antibody (60271-1-Ig, Clone: 4A7G3, red).



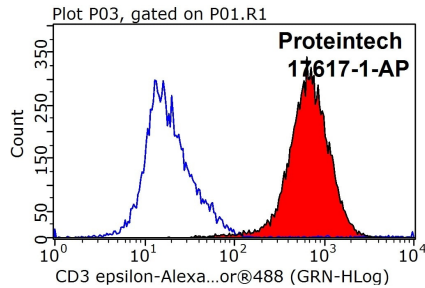
Immunofluorescent analysis of (4% PFA) fixed human tonsillitis tissue using CD3 antibody (17617-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CD20 antibody (60271-1-Ig, Clone: 4A7G3, red).



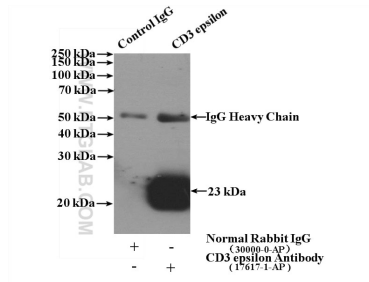
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 17617-1-AP (CD3 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 17617-1-AP (CD3 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10<sup>6</sup> Jurkat cells were stained with 0.5ug CD3 antibody (17617-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.



IP result of anti-CD3 (IP:17617-1-AP, 4ug; Detection:17617-1-AP 1:1000) with Jurkat cells lysate 3600ug.