

For Research Use Only

# CD3 Monoclonal antibody

Catalog Number: 60181-1-Ig

Featured Product

34 Publications



## Basic Information

<b>Catalog Number:</b> 60181-1-Ig	<b>GenBank Accession Number:</b> BC049847	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 916	<b>CloneNo.:</b> 3F3A1
<b>Source:</b> Mouse	<b>ENSEMBL Gene ID:</b> ENSG00000198851	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:3200-1:12800 IF 1:200-1:800
<b>Isotype:</b> IgG2b	<b>UNIPROT ID:</b> P07766	
<b>Immunogen Catalog Number:</b> AG11797	<b>Full Name:</b> CD3e molecule, epsilon (CD3-TCR complex)	
	<b>Calculated MW:</b> 207 aa, 23 kDa	
	<b>Observed MW:</b> 23 kDa	

## Applications

<b>Tested Applications:</b> WB, IF, FC, IHC, ELISA	<b>Positive Controls:</b> WB : MOLT-4 cells, Jurkat cells, human PBMCs IHC : human tonsillitis tissue, human colon tissue IF : human tonsillitis tissue, Jurkat cells
<b>Cited Applications:</b> IF, FC, IHC	
<b>Species Specificity:</b> human	
<b>Cited Species:</b> human	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## 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 monoclonal antibody directed against the epsilon chain of human CD3 molecule.

## Notable Publications

Author	Pubmed ID	Journal	Application
Jiayu Wang	34537815	Cell Death Discov	IF
Wenbo Zhao	36309750	J Transl Med	
Jing-Ya Yang	33107682	J Cell Mol Med	IF

## Storage

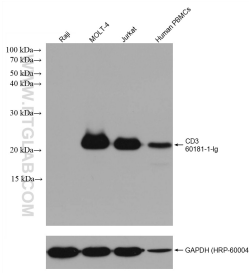
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

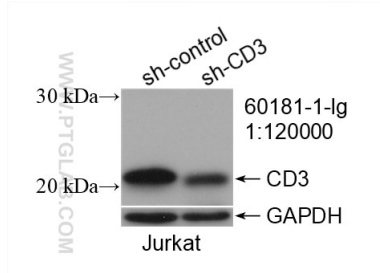
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

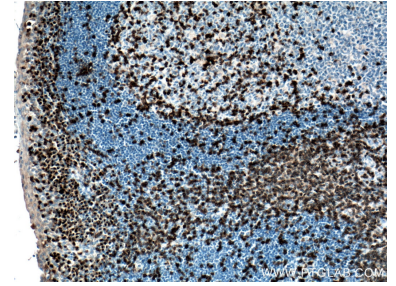
## Selected Validation Data



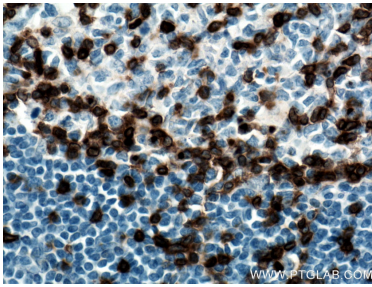
Various lysates were subjected to SDS PAGE followed by western blot with 60181-1-Ig (CD3 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



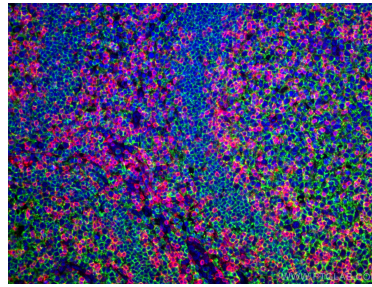
WB result of CD3 antibody (60181-1-Ig; 1:120000; incubated at room temperature for 1.5 hours) with sh-Control and sh-CD3 transfected Jurkat cells.



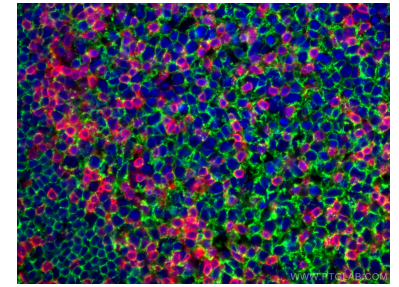
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 60181-1-Ig (CD3E antibody) at dilution of 1:6400 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



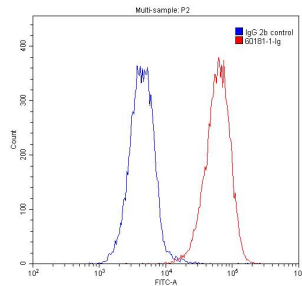
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 60181-1-Ig (CD3E antibody) at dilution of 1:6400 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed human tonsillitis tissue using CD3 antibody (60181-1-Ig, Clone: 3F3A1) at dilution of 1:400 and CoraLite®594-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CD20 antibody (24828-1-AP, green).



Immunofluorescent analysis of (4% PFA) fixed human tonsillitis tissue using CD3 antibody (60181-1-Ig, Clone: 3F3A1) at dilution of 1:400 and CoraLite®594-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CD20 antibody (24828-1-AP, green).



$1 \times 10^6$  Jurkat cells were stained with 0.20ug CD3 antibody (60181-1-Ig, red) and control antibody (blue). Fixed with 90% MeOH.