# For Research Use Only

# CD3 Monoclonal antibody

Catalog Number:60181-1-lg Featured Product

33 Publications



**Basic Information** 

Catalog Number: 60181-1-lg Size:

1000 µg/ml Source:

Mouse Isotype: lgG2b

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

Calculated MW: 207 aa, 23 kDa Observed MW: 23 kDa

complex)

**Purification Method:** Protein A purification

CloneNo.:

3F3A1

Recommended Dilutions: WB 1:5000-1:50000 IHC 1:3200-1:12800 IF 1:200-1:800

# **Applications**

**Tested Applications:** 

FC, IF/ICC, IF-P, IHC, WB, ELISA

**Cited Applications:** FC, IF, IHC

**Species Specificity:** 

human

Cited Species:

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: MOLT-4 cells, Jurkat cells, human PBMCs IHC: human tonsillitis tissue, human colon tissue

IF: human tonsillitis tissue, Jurkat cells

# **Background Information**

CD3 is a complex of proteins that directly associates with the T cell receptor (TCR). The TCR/CD3 complex of Tlymphocytes 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.

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

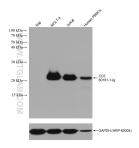
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

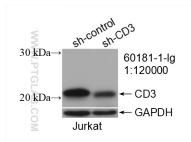
T: 4006900926 E: Proteintech-CN@ptglab.com

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

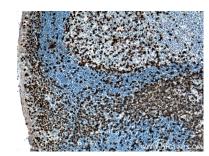
### Selected Validation Data



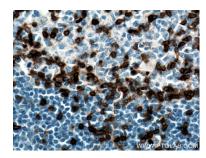
Various lysates were subjected to SDS PAGE followed by western blot with 60181-1-1g (CD3 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



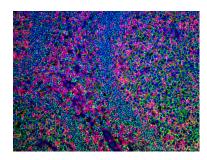
WB result of CD3 antibody (60181-1-Ig; 1:120000; incubated at room temperature for 1.5 hours) with sh-Control and sh-CD3 transfected Jurkat cells.



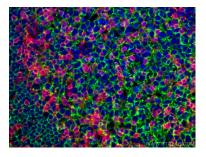
Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 60181-1-Ig(CD3E antibody) at dilution of 1:6400 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



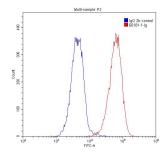
Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 60181-1-Ig(CD3E antibody) at dilution of 1:6400 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed human tonsillitis tissue using CD3 antibody (60181-1-lg, 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 Affini Pure Goat Anti-Mouse IgG(H+L), CD20 antibody (24828-1-AP, green).



1X10^6 Jurkat cells were stained with 0.20ug CD3 antibody (60181-1-1g, red) and control antibody (blue). Fixed with 90% MeOH.