

For Research Use Only

# Alpha Tubulin Monoclonal antibody

Catalog Number: 66031-1-Ig **876 Publications**



## Basic Information

<b>Catalog Number:</b> 66031-1-Ig	<b>GenBank Accession Number:</b> BC009314	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 10376	<b>CloneNo.:</b> 1E4C11
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P68363	<b>Recommended Dilutions:</b> WB 1:20000-1:100000 IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate IHC 1:200-1:1000 IF 1:500-1:2000
<b>Isotype:</b> IgG2b	<b>Full Name:</b> tubulin, alpha 1b	
<b>Immunogen Catalog Number:</b> AG18034	<b>Calculated MW:</b> 50 kDa	
	<b>Observed MW:</b> 50-55 kDa	

## Applications

**Tested Applications:**  
WB, IP, IF, FC, IHC, ELISA

**Cited Applications:**  
WB, IP, IF, IHC, CoIP

**Species Specificity:**  
human, mouse, rat, Canine

**Cited Species:**  
human, goat, tick, chicken, rat, sheep, mouse, monkey, rabbit, zebrafish

**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 :** HeLa cells, HEK-293 cells, HepG2 cells, Jurkat cells, K-562 cells, HSC-T6 cells, NIH/3T3 cells, 4T1 cells

**IP :** HeLa cells,

**IHC :** human tonsillitis tissue, human liver cancer tissue, human colon cancer tissue

**IF :** HeLa cells, rat brain tissue, MCF-7 cells, HepG2 cells

## Background Information

There are five tubulins in human cells: alpha, beta, gamma, delta, and epsilon. Tubulins are conserved across species. They form heterodimers, which multimerize to form a microtubule filament. An alpha and beta tubulin heterodimer is the basic structural unit of microtubules. The heterodimer does not come apart once formed. The alpha and beta tubulins, which are each about 55 kDa MW, are homologous but not identical. Alpha tubulin is useful for scientists across fields as an internal control due to its high, ubiquitous expression pattern. Tubulin expression may vary according to resistance to antimicrobial and antimetabolic drugs. This antibody specifically recognizes Tubulin Alpha.

## Notable Publications

Author	Pubmed ID	Journal	Application
Sirwan Sleman	36179070	Viral Immunol	WB
Pengcheng Ma	36179027	Sci Adv	WB
Wei Wen	33133097	Front Immunol	WB

## Storage

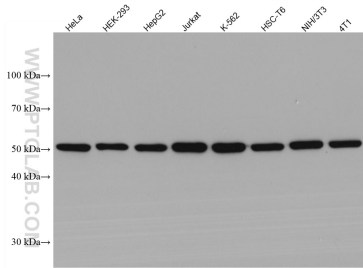
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

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

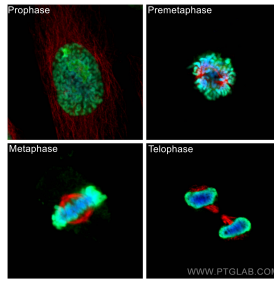
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

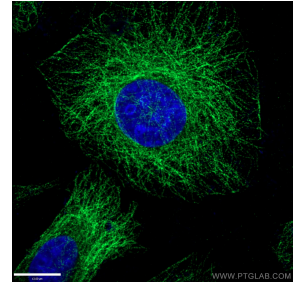
## Selected Validation Data



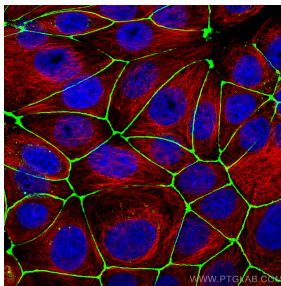
Various lysates were subjected to SDS PAGE followed by western blot with 66031-1-Ig (Alpha Tubulin antibody) at dilution of 1:200000 incubated at room temperature for 1.5 hours.



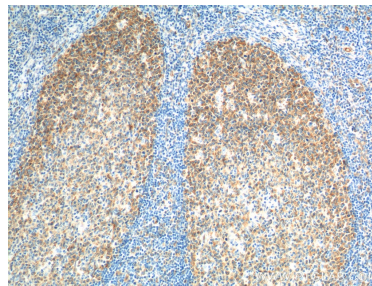
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using Alpha Tubulin antibody (66031-1-Ig, Clone: 1E4C11) at dilution of 1:1000 and CoraLite®594-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), Histone H1.2 antibody (19649-1-AP, green).



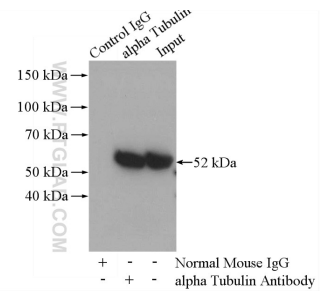
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using 66031-1-Ig(alpha Tubulin antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



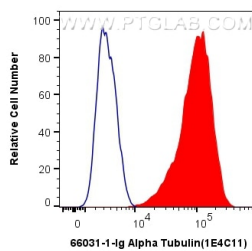
Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using Alpha Tubulin antibody (66031-1-Ig, Clone: 1E4C11) at dilution of 1:1000 and CoraLite®594-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), ZO-1 antibody (21773-1-AP, green).



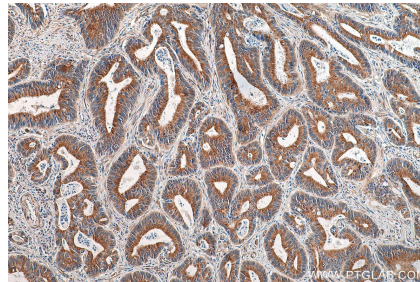
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 66031-1-Ig (alpha Tubulin antibody at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



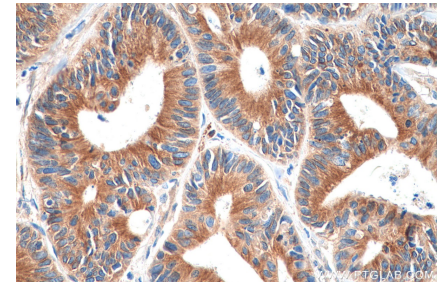
IP result of anti-Alpha Tubulin (IP:66031-1-Ig, 5ug; Detection:11224-1-AP 1:1000) with HeLa cells lysate 2800ug.



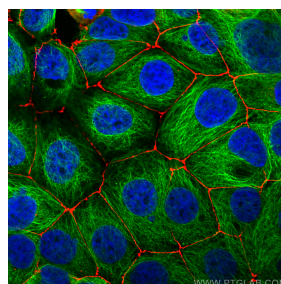
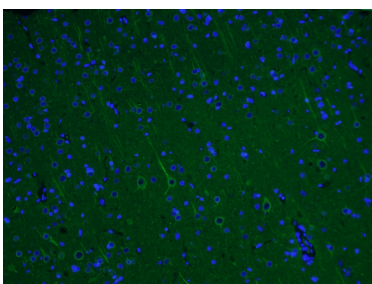
1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human Alpha Tubulin (66031-1-Ig, Clone:1E4C11) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG2b Isotype Control (MPC-11) (65128-1-Ig, Clone: MPC-11) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 66031-1-Ig (Alpha Tubulin 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 colon cancer tissue slide using 66031-1-Ig (Alpha Tubulin antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed rat brain tissue using 66031-1-Ig (alpha Tubulin antibody) at dilution of 1:100 and CoraLite488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).

Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using Alpha Tubulin antibody (66031-1-Ig, Clone: 1E4C11 ) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), ZO-1 antibody (21773-1-AP, red).