

For Research Use Only

Alpha Tubulin Monoclonal antibody

Catalog Number: 66031-1-Ig

Featured Product

1350 Publications



Basic Information

Catalog Number:

66031-1-Ig

Size:

150ul, Concentration: 1000 ug/ml by Nanodrop;

Source:

Mouse

Isotype:

IgG2b

Immunogen Catalog Number:

AG18034

GenBank Accession Number:

BC009314

GeneID (NCBI):

10376

UNIPROT ID:

P68363

Full Name:

tubulin, alpha 1b

Calculated MW:

50 kDa

Observed MW:

50-55 kDa

Purification Method:

Protein A purification

CloneNo.:

1E4C11

Recommended Dilutions:

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/ICC: 1:500-1:2000

FC (Intra): 0.40 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Cited Applications:

WB, IHC, IF, IP, CoIP

Species Specificity:

human, mouse, rat, canine

Cited Species:

human, mouse, rat, rabbit, monkey, chicken, zebrafish, sheep, goat, tick

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/ICC: HeLa cells, HepG2 cells, MCF-7 cells

FC (Intra): HeLa 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 antimitotic drugs. This antibody specifically recognizes Tubulin Alpha.

Notable Publications

| Author | Pubmed ID | Journal | Application |
|---------------|-----------|---------------|-------------|
| Pengcheng Ma | 36179027 | Sci Adv | WB |
| Sirwan Sleman | 36179070 | Viral Immunol | 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, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

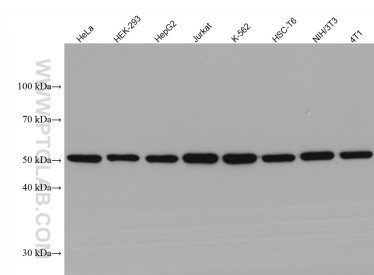
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

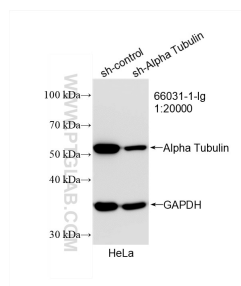
E: proteintech@ptglab.com
W: ptglab.com

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

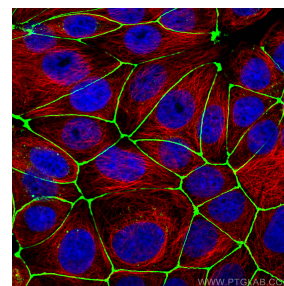
Selected Validation Data



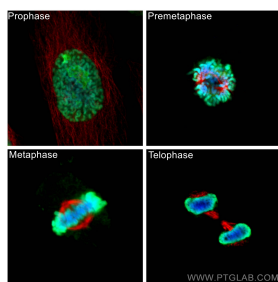
Various lysates were subjected to SDS PAGE followed by western blot with 66031-1-Ig (Alpha Tubulin antibody) at dilution of 1:200000 incubated at room temperature for 1.5 hours.



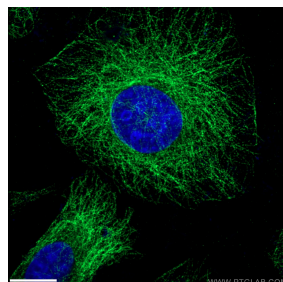
WB result of Alpha Tubulin antibody (66031-1-Ig; 1:20000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Alpha Tubulin transfected HeLa cells.



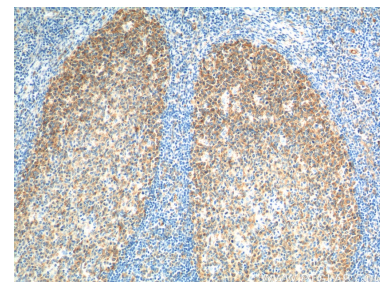
Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using Alpha Tubulin antibody (66031-1-Ig, Clone: 1E4C11) at dilution of 1:1000 and CoraLite®594-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), ZO-1 antibody (21773-1-AP, green).



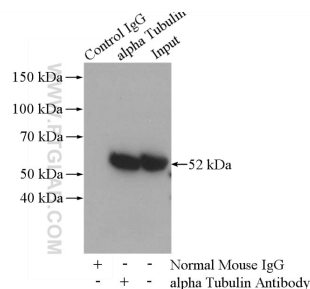
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using Alpha Tubulin antibody (66031-1-Ig, Clone: 1E4C11) at dilution of 1:1000 and CoraLite®594-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), Histone H1.2 antibody (19649-1-AP, green).



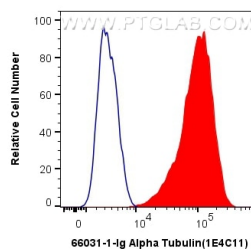
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using 66031-1-Ig(alpha Tubulin antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



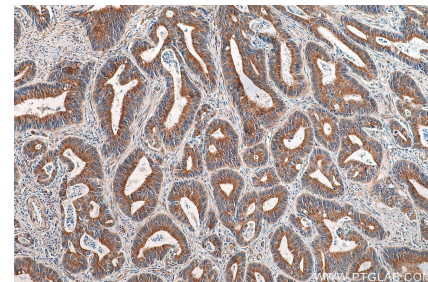
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 66031-1-Ig (alpha Tubulin antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



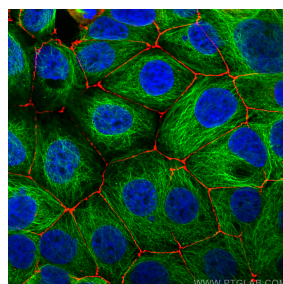
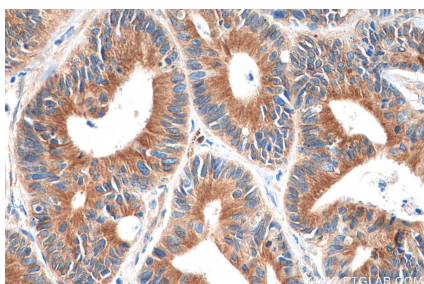
IP result of anti-Alpha Tubulin (IP:66031-1-Ig, 5ug; Detection:11224-1-AP 1:1000) with HeLa cells lysate 2800ug.



1X10⁶ 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.



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 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).