

For Research Use Only

# Alpha Tubulin Polyclonal antibody

Catalog Number: 11224-1-AP

1059 Publications



## Basic Information

**Catalog Number:**

11224-1-AP

**Size:**

600 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG1727

**GenBank Accession Number:**

BC009314

**GeneID (NCBI):**

10376

**Full Name:**

tubulin, alpha 1b

**Calculated MW:**

50 kDa

**Observed MW:**

50-55 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:2000-1:15000

IP 0.5-4.0 µg for IP and 1:500-1:2000 for WB

IHC 1:50-1:500

IF 1:50-1:500

## Applications

**Tested Applications:**

FC, IF, IHC, IP, WB, ELISA

**Cited Applications:**

CoIP, IF, IHC, IP, WB

**Species Specificity:**

human, mouse, rat

**Cited Species:**

human, goat, chicken, rat, mouse, monkey, zebrafish, P. lividus, hamster, 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:** A549 cells, HEK-293 cells, HeLa cells, NIH/3T3 cells, rat brain

**IP:** HeLa cells,

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

**IF:** HeLa cells, HepG2 cells, MCF-7 cells, Lymphatic endothelial 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.

## Notable Publications

Author	Pubmed ID	Journal	Application
Xiang Li	36246628	Front Genet	WB
Lin-Tao Xu	34601084	J Ethnopharmacol	WB
Yufei Yao	34660289	Front Oncol	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

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

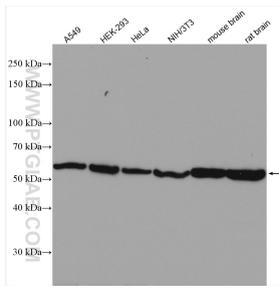
T: 4006900926

E: Proteintech-CN@ptglab.com

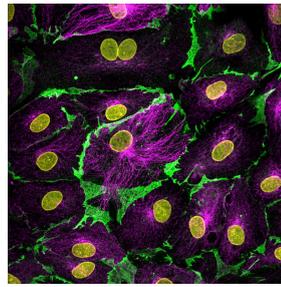
W: ptgcn.com

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

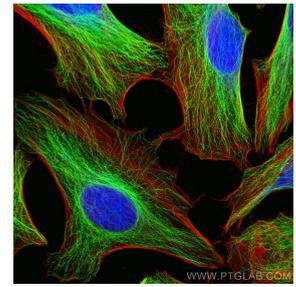
## Selected Validation Data



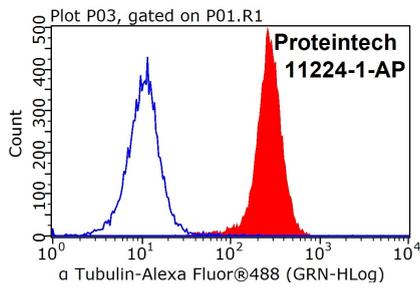
Various lysates were subjected to SDS PAGE followed by western blot with 11224-1-AP (alpha Tubulin antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



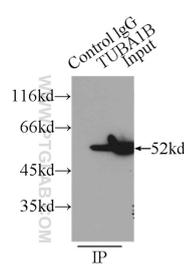
Lymphatic endothelial cells were stained for CD31 (green, Cat. No CL488-66065, 1:200) and alpha tubulin (magenta, Cat. 11224-1-AP, 1:200) with DAPI as a counterstain for visualizing the nucleus (yellow). CD31 is an endothelial cell adhesion protein and was conjugated to CoraLite-488 fluorescent dye to allow for direct visualization. Alpha tubulin is a cytoskeletal protein important in cell division and migration and was visualized with an Alexa Fluor 568 secondary antibody.



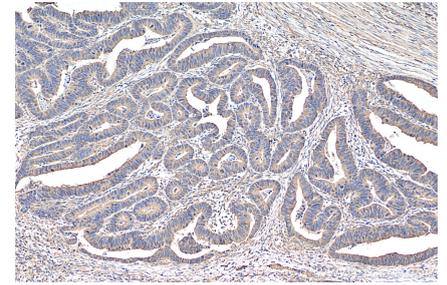
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using Alpha Tubulin antibody (11224-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



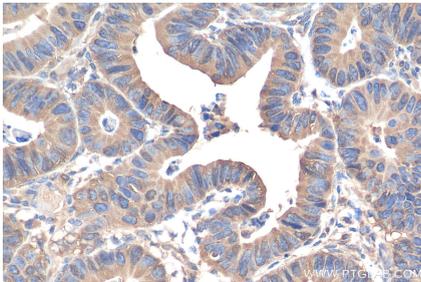
1X10<sup>6</sup> HEK-293 cells were stained with 0.2ug alpha Tubulin antibody (11224-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). FITC-Goat anti-Rabbit IgG with dilution 1:100.



IP Result of anti-alpha Tubulin (IP:11224-1-AP, 3ug; Detection:11224-1-AP 1:1000) with HeLa cells lysate 5000ug.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 11224-1-AP (Alpha Tubulin antibody) at dilution of 1:200 (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 11224-1-AP (Alpha Tubulin antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).