

For Research Use Only

Alpha Tubulin Polyclonal antibody



Catalog Number: 11224-1-AP **497 Publications**

Basic Information

Catalog Number:
11224-1-AP

Size:
150ul, Concentration: 400 µg/ml by Nanodrop and 287 µg/ml by Bradford method using BSA as the standard;

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 ug for IP and 1:500-1:2000 for WB

IHC 1:20-1:200

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:

chicken, goat, hamster, human, monkey, mouse, pig, rat, Tribolium castaneum, 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 : A549 cells, HEK-293 cells

IP : HeLa cells,

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

IF : MCF-7 cells, HepG2 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
Dan-Qian Chen	33062239	Ther Adv Chronic Dis	WB
Guangxin Lv	29152140	Oncotarget	WB
Xujuan Sun	27697636	Biomed Pharmacother	

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

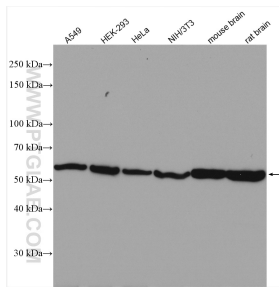
For technical support and original validation data for this product please contact:

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

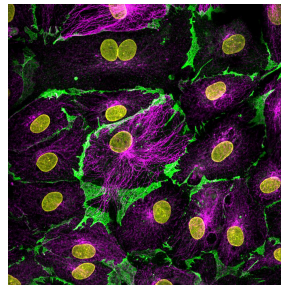
E: proteintech@ptglab.com
W: ptglab.com

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

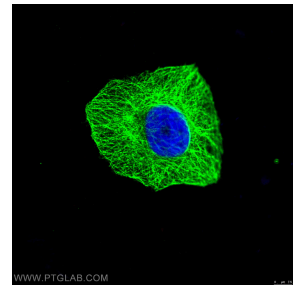
Selected Validation Data



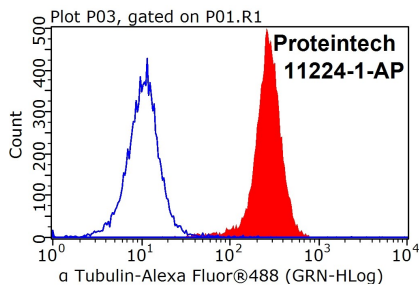
Various lysates were subjected to SDS PAGE followed by western blot with 11224-1-AP (alpha Tubulin antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



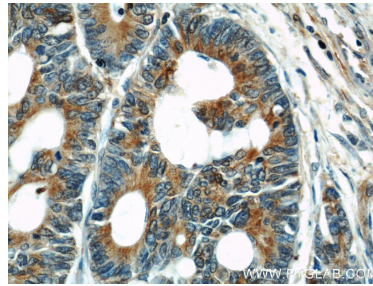
Lymphatic endothelial cells were stained for CD31 (green, Cat. No CL488-66065, 1:200) and alpha tubulin (magenta, Cat. 11224-1-AP, 1:200) with DAPI as a counterstain for visualizing the nucleus (yellow). CD31 is an endothelial cell adhesion protein and was conjugated to CoraLite-488 fluorescent dye to 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.



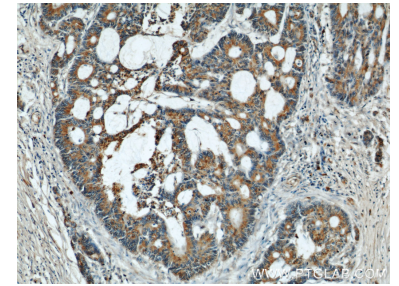
Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using 11224-1-AP (alpha Tubulin antibody) at dilution of 1:200 and CoraLite488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



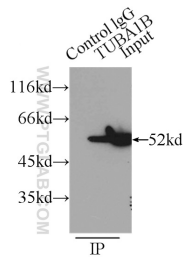
1X10⁶ HEK-293 cells were stained with 0.2ug alpha Tubulin antibody (11224-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). FITC-Goat anti-Rabbit IgG with dilution 1:100.



Immunohistochemical analysis of paraffin-embedded human colon cancer using 11224-1-AP (alpha Tubulin antibody) at dilution of 1:50 (under 40x lens).



Immunohistochemical analysis of paraffin-embedded human colon cancer using 11224-1-AP (alpha Tubulin antibody) at dilution of 1:50 (under 10x lens).



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