

For Research Use Only

Alpha Tubulin Polyclonal antibody

Catalog Number: 11224-1-AP

1714 Publications



Basic Information

Catalog Number:

11224-1-AP

Concentration:

500 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG1727

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:

Antigen affinity purification

Recommended Dilutions:

WB: 1:3000-1:12000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:50-1:500

IF-Fro: 1:50-1:500

IF/ICC: 1:50-1:500

FC (Intra): 0.50 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

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

Cited Applications:

WB, IHC, IF, IP, CoIP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, rabbit, monkey, chicken, zebrafish, hamster, goat, p. lividus

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-Fro: mouse testis tissue,

IF/ICC: HeLa cells, HepG2 cells, MCF-7 cells, Lymphatic endothelial cells

FC (Intra): HEK-293 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.

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, pH7.3

Aliquoting is unnecessary for -20°C storage

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

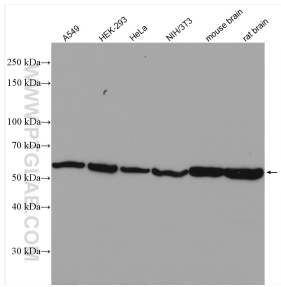
T: 4006900926

E: Proteintech-CN@ptglab.com

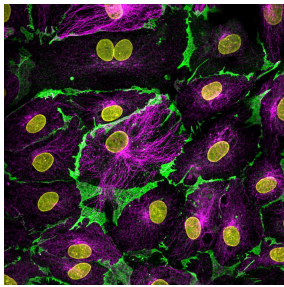
W: ptgcn.com

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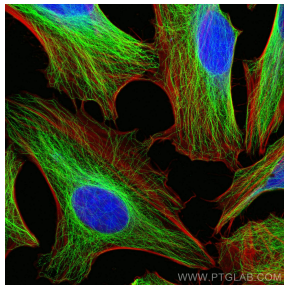
Selected Validation Data



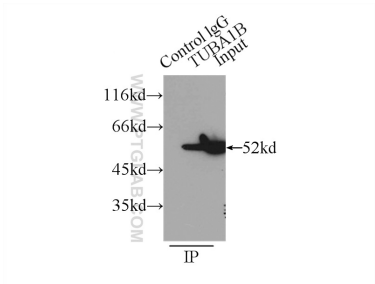
Various lysates were subjected to SDS PAGE followed by western blot with 11224-1-AP (alpha Tubulin antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



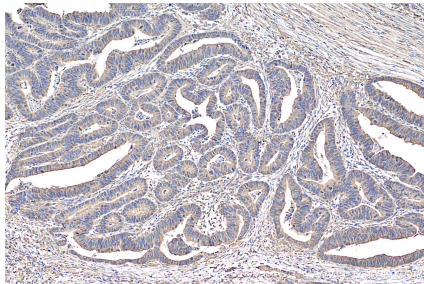
Lymphatic endothelial cells were stained for CD31 (green, Cat. No CL488-66065, 1:200) and alpha tubulin (magenta, Cat. 11224-1-AP, 1:200) with DAPI as a counterstain for visualizing the nucleus (yellow). CD31 is an endothelial cell adhesion protein and was conjugated to CoraLite-488 fluorescent dye to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



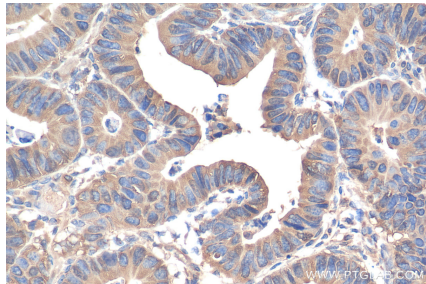
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using Alpha Tubulin antibody (11224-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



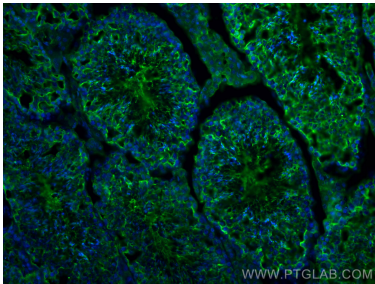
IP result of anti-Alpha Tubulin (IP:11224-1-AP, 3ug; Detection:11224-1-AP 1:1000) with HeLa cells lysate 5000ug.



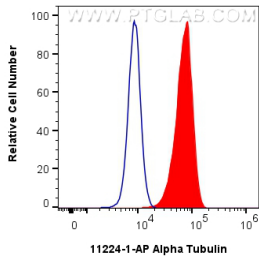
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 11224-1-AP (Alpha Tubulin antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse testis tissue using Alpha Tubulin antibody (11224-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1x10^6 HEK-293 cells were intracellularly stained with 0.5 ug Alpha Tubulin Polyclonal antibody (11224-1-AP) and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.5 ug Rabbit IgG control Rabbit PolyAb (30000-O-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).