

For Research Use Only

# acetylated Tubulin(Lys40) Monoclonal antibody



Catalog Number: 66200-1-Ig **34 Publications**

## Basic Information

<b>Catalog Number:</b> 66200-1-Ig	<b>GenBank Accession Number:</b> NM_006009	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 150UL, Concentration: 700 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 7846	<b>CloneNo.:</b> 7E5H8
<b>Source:</b> Mouse	<b>Full Name:</b> tubulin, alpha 1a	<b>Recommended Dilutions:</b> WB 1:2000-1:10000 IHC 1:1000-1:4000 IF 1:50-1:500
<b>Isotype:</b> IgG1	<b>Calculated MW:</b> 52 kDa	
	<b>Observed MW:</b> 55 kDa	

## Applications

<b>Tested Applications:</b> IF, IHC, WB, ELISA	<b>Positive Controls:</b> WB : rat testis tissue, NCCIT cells, Neuro-2a cells, L02 cells, pig cerebellum tissue, rat brain tissue, mouse ovary tissue, HEK-293 cells, mouse testis
<b>Cited Applications:</b> IF, WB	<b>IHC :</b> mouse ovary tissue, human gliomas tissue, rat brain tissue, mouse brain tissue, human lung cancer tissue
<b>Species Specificity:</b> human, mouse, rat, dog, pig	<b>IF :</b> MDCK cells, mouse brain tissue
<b>Cited Species:</b> bovine, Drosophila, human, mouse, rat, swine	

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

Tubulin, composed of heterodimers of alpha and beta tubulin, is the mainly component of microtubules which play important roles in cell motility, mitosis, and intracellular vesicle transport. Both alpha and beta tubulin undergo several posttranslational modifications such as polyglutamylation and acetylation/deacetylation. Tubulin acetylation occurs on lysine-40 at the N-terminal of alpha tubulin and is conserved across species. The histone deacetylase HDAC 6 and SIRT2 has been identified as tubulin deacetylases. Reversible acetylation of alpha tubulin may be implicated in regulating microtubule stability, cell motility, and axon regeneration. The level of acetylated tubulin has been linked to epithelial malignancies and sensitivity to chemotherapy. In addition, acetylated tubulin has been widely used as a marker for primary cilia. This antibody is specific to the acetylated tubulin; it does not recognize non-acetylated tubulin. (24268707, 23881549)

## Notable Publications

Author	Pubmed ID	Journal	Application
Yan Yan	28966044	Dev Cell	WB
Casey D Gailey	32935890	Dev Dyn	IF
Yanwei Sha	31502483	Syst Biol Reprod Med	WB,IF

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.

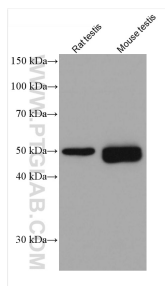
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

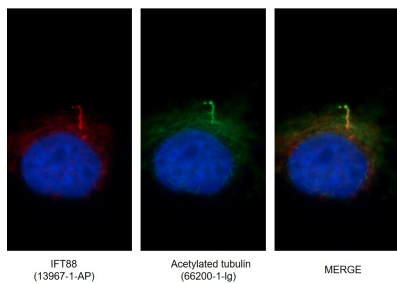
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T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

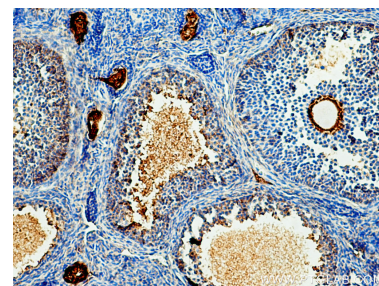
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 66200-1-Ig (acetylated Tubulin(Lys40) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunofluorescent images of MDCK cells stained for IFT88 rabbit pAb (13967-1-AP) and acetylated tubulin mouse mAb (66200-1-Ig) at dilution of 1:50, further stained with Alexa Fluor 594-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L) for 13967-1-AP, and Alexa Fluor 488-conjugated AffiniPure Goat anti-Mouse IgG (H+L) for 66200-1-Ig.



Immunohistochemical analysis of paraffin-embedded mouse ovary tissue slide using 66200-1-Ig (acetylated Tubulin(Lys40) antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).