

For Research Use Only

acetylated Tubulin(Lys40) Monoclonal antibody



Catalog Number: 66200-1-Ig

27 Publications

Basic Information

Catalog Number:

66200-1-Ig

Size:

150UL, Concentration: 700 µg/ml by Bradford method using BSA as the standard;

Source:

Mouse

Isotype:

IgG1

GenBank Accession Number:

NM_006009

GeneID (NCBI):

7846

Full Name:

tubulin, alpha 1a

Calculated MW:

52 kDa

Observed MW:

55 kDa

Purification Method:

Protein G purification

CloneNo.:

7E5H8

Recommended Dilutions:

WB 1:2000-1:10000

IHC 1:1000-1:4000

IF 1:50-1:500

Applications

Tested Applications:

IF, IHC, WB, ELISA

Cited Applications:

IF, WB

Species Specificity:

human, mouse, rat, dog, pig

Cited Species:

bovine, Drosophila, human, mouse, rat

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: rat testis tissue, NCCIT cells, Neuro-2a cells, L02 cells, pig cerebellum tissue, rat brain tissue, mouse ovary tissue, HEK-293 cells, mouse testis

IHC: mouse ovary tissue, human gliomas tissue, rat brain tissue, mouse brain tissue, human lung cancer tissue

IF: MDCK cells, mouse brain tissue

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 |
| Yanwei Sha | 31502483 | Syst Biol Reprod Med | WB,IF |
| Lei Zhao | 30202098 | Oncogene | 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

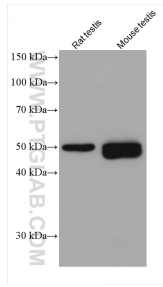
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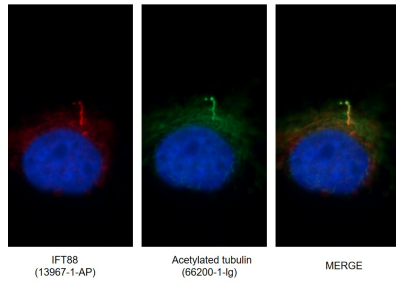
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W: ptglab.com

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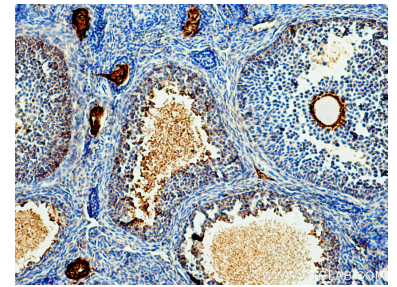
Selected Validation Data



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).