

For Research Use Only

# CoraLite® Plus 488-conjugated Acetyl-Tubulin (Lys40) Monoclonal antibody

Catalog Number:**CL488-66200** 3 Publications



## Basic Information

<b>Catalog Number:</b>	CL488-66200	<b>GenBank Accession Number:</b>	NM_006009	<b>Purification Method:</b>	Protein G purification
<b>Size:</b>	1000 ug/ml	<b>GeneID (NCBI):</b>	7846	<b>CloneNo.:</b>	7E5H8
<b>Source:</b>	Mouse	<b>UNIPROT ID:</b>	Q71U36	<b>Recommended Dilutions:</b>	IF-Fro 1:50-1:500 IF/ICC 1:50-1:500
<b>Isotype:</b>	IgG1	<b>Full Name:</b>	tubulin, alpha 1a	<b>Excitation/Emission maxima wavelengths:</b>	493 nm / 522 nm
		<b>Calculated MW:</b>	52 kDa		

## Applications

<b>Tested Applications:</b> IF/ICC, IF-Fro	<b>Positive Controls:</b> IF-Fro: mouse kidney tissue, IF/ICC: MDCK cells, hTERT-RPE1 cells
<b>Cited Applications:</b> IF	
<b>Species Specificity:</b> human, mouse, rat, pig, canine	
<b>Cited Species:</b> human, rat	

## Background Information

Tubulin, composed of heterodimers of alpha and beta tubulin, is the main 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 HDAC6 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). This antibody is conjugated with CL488, Ex/Em 488 nm/515 nm.

## Notable Publications

Author	Pubmed ID	Journal	Application
Vincent Manna	34585152	STAR Protoc	IF
Vincent J Manna	35187520	BBA Adv	IF
Tingting Zhang	37900281	Front Cell Dev Biol	IF

## Storage

**Storage:**  
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

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

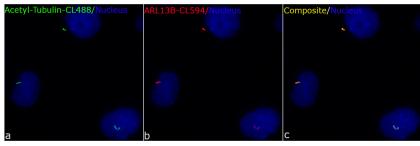
T: 4006900926

E: Proteintech-CN@ptglab.com

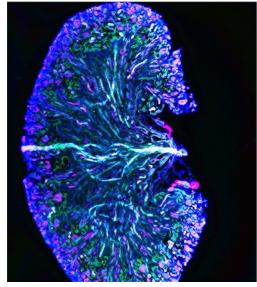
W: ptgcn.com

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

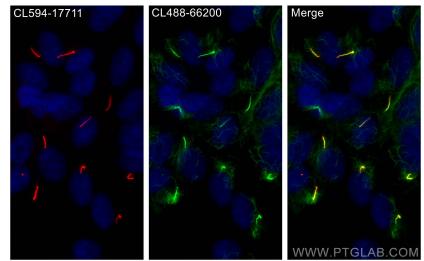
## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed MDCK cells using CL488-66200 (GREEN, Acetyl-Tubulin (Lys40) antibody) at dilution of 1:50 and CL594-17711 (RED, ARL13B antibody) at dilution of 1:50.



Frozen tissue section of adult mouse kidney was stained for acetylated  $\alpha$ -tubulin (magenta, Cat. No CL488-66200), CD-31/PECAM-1 (white), and Shh (green, Cat. No 20697-1-AP) with DAPI as a counterstain for visualizing the nucleus (blue). acetylated  $\alpha$ -tubulin stains primary cilia and was conjugated to Coralite-488 fluorescent dye and pseudocolored to magenta. CD-31 stains endocardial/endothelial cells and was visualized with an Alexa Fluor 647 secondary



Immunofluorescent analysis of (4% PFA) fixed hTERT-RPE1 cells using Coralite® Plus 488 Acetyl-Tubulin (Lys40) antibody (CL488-66200, Clone: 7E5H8 ) at dilution of 1:200, Coralite® 594 ARL13B antibody (CL594-17711, red).