

For Research Use Only

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

Catalog Number: CL488-66200

3 Publications



Basic Information

Catalog Number: CL488-66200	GenBank Accession Number: NM_006009	Purification Method: Protein G purification
Size: 100ul , Concentration: 1000 ug/ml by Nanodrop;	GeneID (NCBI): 7846	CloneNo.: 7E5H8
Source: Mouse	UNIPROT ID: Q71U36	Recommended Dilutions: IF-Fro 1:50-1:500 IF/ICC 1:50-1:500
Isotype: IgG1	Full Name: tubulin, alpha 1a	Excitation/Emission maxima wavelengths: 493 nm / 522 nm
	Calculated MW: 52 kDa	

Applications

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

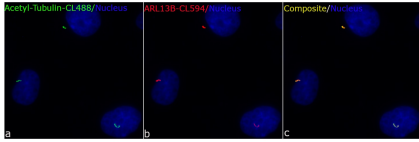
Storage

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

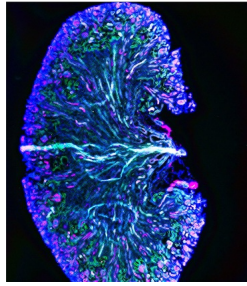
For technical support and original validation data for this product please contact:
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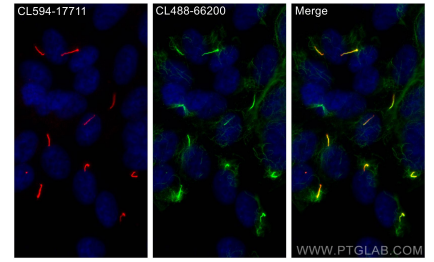
Selected Validation Data



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 α -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 α -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



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).