For Research Use Only

CoraLite®555-conjugated Acetyl-Tubulin (Lys40) Monoclonal antibody



Catalog Number: CL555-66200

Basic Information

Catalog Number: CL555-66200 N

Concentration: 1000 µg/ml Source:

Mouse Isotype: IgG1 GenBank Accession Number:

NM_006009 GeneID (NCBI): 7846 UNIPROT ID: Q71U36

Full Name: tubulin, alpha 1a

Calculated MW: 52 kDa Observed MW: 50-55 kDa Purification Method:

Protein G purification

CloneNo.: 7E5H8

Recommended Dilutions: IF/ICC 1:50-1:500

Excitation/Emission maxima wavelengths:

557 nm / 570 nm

Applications

Tested Applications:

IF/ICC

Species Specificity:

human, mouse, rat, pig, canine

Positive Controls:

IF/ICC: MDCK cells, hTERT-RPE1 cells

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 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)

Storage

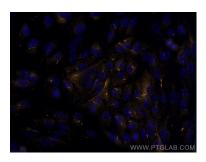
Storage:

Store at -20°C. Avoid exposure to light. Stable for one year after shipment. Storage Ruffer.

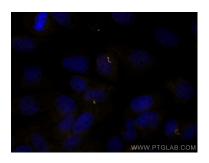
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed hTERT-RPE1 cells using Coralite®555 Acetyl-Tubulin (Lys40) antibody (CL555-66200, Clone: 7E5H8) at dilution of 1:200.



Immunofluorescent analysis of (4% PFA) fixed MDCK cells using Coralite®555 Acetyl-Tubulin (Lys40) antibody (CL555-66200, Clone: 7E5H8) at dilution of 1:200.