

1D-465-C025

## Monoclonal Antibody to gamma-tubulin Dyomics 647 (DY647) conjugated (0.025 mg)

<b>Clone:</b>	TU-30
<b>Isotype:</b>	Mouse IgG1
<b>Specificity:</b>	The antibody TU-30 recognizes C-terminal peptide sequence EYHAATRPDYISWGQTQ (aa 434-449) of gamma-tubulin, a 48 kDa structural constituent of cytoskeleton and microtubule organizing center (MTOC).
<b>Regulatory Status:</b>	RUO
<b>Immunogen:</b>	C-terminal peptide of gamma-tubulin conjugated to KLH.
<b>Species Reactivity:</b>	Human, Porcine, Mouse, Rat, Bovine, Chicken, Protozoa, Plants
<b>Preparation:</b>	The purified antibody is conjugated with Dyomics 647 (DY647) under optimum conditions. The conjugate is purified by size-exclusion chromatography.
<b>Concentration:</b>	1 mg/ml
<b>Storage Buffer:</b>	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
<b>Storage / Stability:</b>	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.
<b>Usage:</b>	<p>Immunocytochemistry on fixed and permeabilized cells. Suggested working dilution is 1:100.</p> <p>The conjugate was also successfully used on paraffin sections using confocal microscopy.</p> <p>It is recommended that the user titrates the reagent for use in the particular testing system.</p>
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	<p>The gamma-tubulin (TUBG1; relative molecular weight about 48 kDa) is a minor member of tubulin family (less than 0.01% of tubulin dimer). The gamma-tubulin ring structures, however, serve to provide structural primer for initiation of microtubular nucleation and growth, thereby being crucial for microtubule-based cellular processes, above all for mitotic spindle formation. In animal cells, a center of microtubule organization is the centrosome composed of a pair of cylindrical centrioles surrounded by fibrous pericentriolar material containing gamma-tubulin. Formation of the mitotic spindle is preceded by duplication of centrosome during S phase. Before mitosis, both centrosomes increase their microtubule nucleation capacity and form two microtubule asters that are pushed apart from each other by the forces of motor proteins associated at the microtubule surface.</p>

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**Antibodies**

**References:**

- \*Wiese C, Zheng Y: Microtubule nucleation: gamma-tubulin and beyond. *J Cell Sci.* 2006 Oct 15;119(Pt 20):4143-53.
- \*Haren L, Remy MH, Bazin I, Callebaut I, Wright M, Merdes A. NEDD1-dependent recruitment of the gamma-tubulin ring complex to the centrosome is necessary for centriole duplication and spindle assembly. *J Cell Biol.* 2006 Feb 13;172(4):505-15.
- \*Draberova L, Draberova E, Surviladze Z, Draber P, Draber P: Protein tyrosine kinase p53/p56 (lyn) forms complexes with gamma-tubulin in rat basophilic leukemia cells. *Int Immunol.* 1999 Nov;11(11):1829-39.
- \*Novakova M, Draberova E, Schurmann W, Czihak G, Viklicky V, Draber P: gamma-Tubulin redistribution in taxol-treated mitotic cells probed by monoclonal antibodies. *Cell Motil Cytoskeleton.* 1996;33(1):38-51.
- \*Binarova P, Ceniklova V, Hause B, Kubatova E, Lysak M, Dolezel J, Bogre L, Draber P: Nuclear gamma-tubulin during acentriolar plant mitosis. *Plant Cell.* 2000 Mar;12(3):433-42.
- \*Libusova L, Sulimenko T, Sulimenko V, Hozak P, Draber P: gamma-Tubulin in Leishmania: cell cycle-dependent changes in subcellular localization and heterogeneity of its isoforms. *Exp Cell Res.* 2004 May 1;295(2):375-86.
- \*Katsetos CD, Reddy G, Dráberová E, Smejkalová B, Del Valle L, Ashraf Q, Tadevosyan A, Yelin K, Maraziotis T, Mishra OP, Mörk S, Legido A, Nissanov J, Baas PW, de Chadarevian JP, Dráber P: Altered cellular distribution and subcellular sorting of gamma-tubulin in diffuse astrocytic gliomas and human glioblastoma cell lines. *J Neuropathol Exp Neurol.* 2006 May;65(5):465-77.
- \*Sulimenko V, Dráberová E, Sulimenko T, Macurek L, Richterová V, Dráber P, Dráber P: Regulation of microtubule formation in activated mast cells by complexes of gamma-tubulin with Fyn and Syk kinases. *J Immunol.* 2006 Jun 15;176(12):7243-53.

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