

11-465-C100

Monoclonal Antibody to gamma-tubulin 1 Purified Antibody (0.1 mg)

Clone:	TU-30
Isotype:	Mouse IgG1
Specificity:	The antibody TU-30 recognizes C-terminus (amino acids 434-449 in human) of gamma-tubulin, a 48 kDa structural constituent of cytoskeleton and microtubule organizing center (MTOC). The epitope was located in the amino acid sequence TRPDYI (aa439-444 in human), which is present on human gamma-tubulin 1 but not on human gamma-tubulin 2.
Regulatory Status:	RUO
Immunogen:	C-terminal peptide of gamma-tubulin counjugated to KLH.
Species Reactivity:	Human, Porcine, Mouse, Rat, Bovine, Chicken, Protozoa, Plants
Application:	Immunocytochemistry Recommended dilution: Purified Antibody: 1-2 µg/ml Staining technique: (a) Fix cells for 10 min in methanol at -20°C and for 6 min in acetone at -20°C; (b) Fix cells directly in methanol for 10 min at -20°C or in acetone for 10 min at -20°C. Incubation: 45 min in room temperature Positive control: P-19 mouse embryonal carcinoma cell line 3T3 mouse fibroblasts Application note: The antibody TU-30 stains only fixed cells. Western Blotting
Purity:	> 95% (by SDS-PAGE)
Purification:	Purified by protein-A affinity chromatography
Concentration:	1 mg/ml
Storage Buffer:	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
Storage / Stability:	Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.
Expiration:	See vial label
Lot Number:	See vial label

For laboratory research only, not for drug, diagnostic or other use.

**Antibodies****Background:**

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. Humans possess two gamma-tubulin genes. Gamma-tubulin 1 represents a ubiquitous isotype, whereas gamma-tubulin 2 is found predominantly in the brain, where it may be endowed with divergent functions beyond microtubule nucleation.

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