

## Product datasheet for **AM03014PU-N**

### gamma Tubulin (TUBG1) Mouse Monoclonal Antibody [Clone ID: TU-30]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	TU-30
Applications:	IF, WB
Recommended Dilution:	<b>Western blot.</b> <b>Immunocytochemistry</b> (1-2 µg/ml) <i>Staining Technique:</i> 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. <i>Incubation Time:</i> 45 min in room temperature. <i>Positive Control:</i> P-19 Mouse embryonal carcinoma cell line 3T3 mouse fibroblasts <b>Note:</b> The antibody TU-30 stains only fixed cells.
Reactivity:	Bovine, Chicken, Human, Mouse, Plant, Porcine, Rat, Protozoa
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	C-terminal peptide (aa 434-449) of gamma-Tubulin conjugated to KLH
Specificity:	The antibody TU-30 recognizes C-terminal peptide sequence of gamma-Tubulin.
Formulation:	Phosphate buffered saline (PBS), pH~7.4 with 15 mM Sodium Azide as preservative State: Aff - Purified State: Liquid purified Ig fraction (> 95% (by SDS-PAGE)
Concentration:	lot specific
Purification:	Protein-A Affinity Chromatography
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C. <b>DO NOT FREEZE!</b>
Stability:	Shelf life: one year from despatch.
Gene Name:	tubulin gamma 1



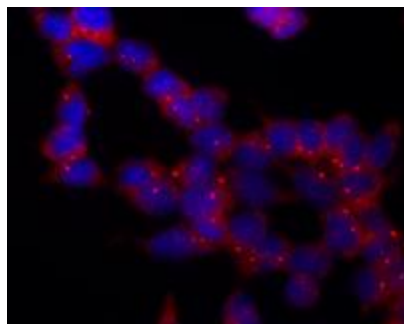
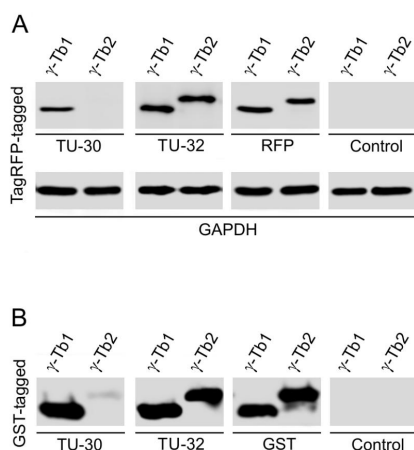
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**Database Link:** [Entrez Gene 7283 Human P23258](#)

**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.

**Synonyms:** Tubulin gamma-1 chain, Gamma-1-tubulin, GCP-1

### Product images:



Differential reactivity of monoclonal antibodies to gamma-tubulin with human gamma-tubulin isotypes. (A) Immunoblots of total cell lysates from SH-SY5Y cells, expressing TagRFP-tagged human gamma-tubulin 1 (gamma-Tb1) or gamma-tubulin 2 (gamma-Tb2), probed with Abs to gamma-tubulin (TU-30, TU-32), TagRFP (RFP) and GAPDH. In control samples, only secondary anti-mouse Ab was applied. (B) Immunoblots of immobilized GST-tagged human C-terminal regions (a.a. 362-451) of gamma-Tb1 or gamma-Tb2 probed with Abs to gamma-tubulin (TU-30, TU-32) and GST. In control samples, only secondary anti-mouse Ab was applied.

Figure 1. Immunofluorescence staining of P19X1 Mouse embryonal carcinoma cell line using anti-gamma-Tubulin antibody (TU-30) (detection by secondary antibody Goat anti-mouse Cy3). Nuclei were stained with DAPI (blue).

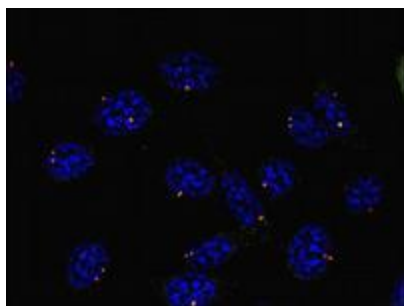


Figure 2. Immunofluorescence staining of Mouse fibroblasts using anti-gamma-Tubulin antibody (TU-30; direct conjugate with Dyomics 547, red). Nuclei were stained with DAPI (blue).

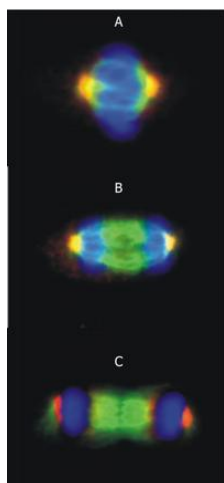


Figure 3. Immunofluorescence staining of microtubular networks in 3T3 Mouse fibroblasts. 3A: Metaphase, 3B: Anaphase, 3C: Telophase. Gamma-Tubulin (red) stained with anti-gamma-Tubulin antibody (TU-30), Alpha-Tubulin (green) with polyclonal anti-alpha-Tubulin antibody and nuclei with DAPI (blue).