# ARG62989
# anti-gamma Tubulin antibody [TU-30]

Package: 100 µg
Store at: -20°C

## Summary

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| Product Description | Mouse Monoclonal antibody [TU-30] recognizes gamma Tubulin |
| Tested Reactivity | Hu, Ms, Rat, Bov, Chk, Pig, Plnt, Prt |
| Tested Application | FACS, ICC/IF, IHC-P, WB |
| Specificity | The clone TU-30 recognizes C-terminal peptide sequence EYHAATRPDYISWGTQ (aa 434-449) of gamma-Tubulin, a 48 kDa structural constituent of cytoskeleton and microtubule organizing center (MTOC). This clone reacts gamma-tubulin 1 but not on human gamma-tubulin 2. |
| Host | Mouse |
| Clonality | Monoclonal |
| Clone | TU-30 |
| Isotype | IgG1 |
| Target Name | gamma Tubulin |
| Immunogen | C-terminal peptide of gamma-Tubulin counjugated to KLH. |
| Epitope | 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. |
| Conjugation | Un-conjugated |
| Alternate Names | GCP-1; CDCBM4; TUBG; Gamma-1-tubulin; Tubulin gamma-1 chain; TUBGCP1; Gamma-tubulin complex component 1 |

## Application Instructions

Application table

| Application | Dilution |
|---|---|
| FACS | Assay-dependent |
| ICC/IF | 1 - 2 µg/ml |
| IHC-P | 1:500 - 1:1000 |
| WB | 1:500 - 1:2000 |

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| Application Note | ICC/IF: 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 at RT. Note: The clone TU-30 stains only fixed cells.<br>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. |
| Positive Control | ICC/IF: P-19 Mouse embryonal carcinoma cell line and 3T3 Mouse fibroblasts. |

## Properties

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| Form | Liquid |
| Purification | Purified from hybridoma culture supernatant by protein-A affinity chromatography. |

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| Purity | > 95% (by SDS-PAGE) |
| Buffer | PBS (pH 7.4) and 15 mM Sodium azide |
| Preservative | 15 mM Sodium azide |
| Concentration | 1 mg/ml |
| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use. |
| Note | For laboratory research only, not for drug, diagnostic or other use. |

## Bioinformation

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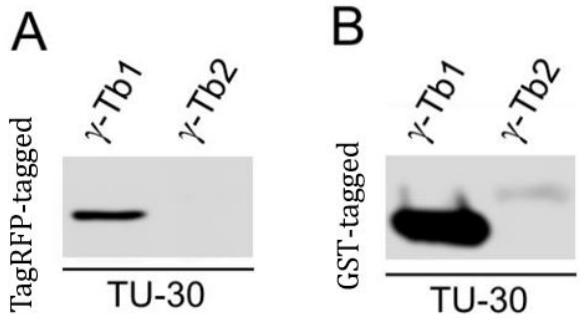
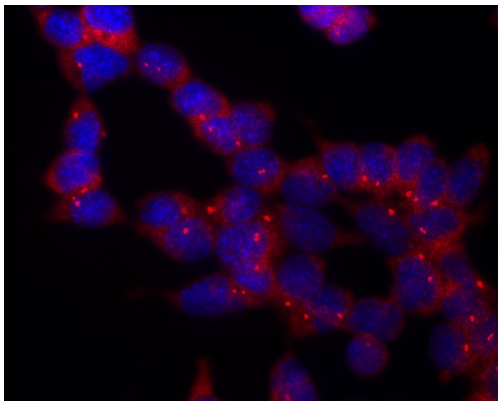
| Gene Symbol | TUBG1 |
| Gene Full Name | tubulin, gamma 1 |
| Background | The gamma-Tubulin (TUBG1; relative molecular weight about 48 kDa) is a minor member of Tubulin family (less that 0.01% of Tubulin dimer). The gamma-Tubulin ring structures, however, serve to provide structural primer for initiation of microtubular nucleation and growth, thereby being crutial 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 microtuble asters that are pushed apart from each other by the forces of motor proteins associated at the microtubule surface. |
| Function | Tubulin is the major constituent of microtubules. The gamma chain is found at microtubule organizing centers (MTOC) such as the spindle poles or the centrosome. Pericentriolar matrix component that regulates alpha/beta chain minus-end nucleation, centrosome duplication and spindle formation. [UniProt] |
| Highlight | Related products:<br>gamma Tubulin antibodies; Anti-Mouse IgG secondary antibodies;<br>Related news:<br>Gene therapy for retinitis pigmentosa (RP)<br>Related poster download:<br>Organelle Markers & Loading Control |
| Research Area | Signaling Transduction antibody |
| Calculated Mw | 51 kDa |
| PTM | Phosphorylation at Ser-131 by BRSK1 regulates centrosome duplication, possibly by mediating relocation of gamma-tubulin and its associated proteins from the cytoplasm to the centrosome. |

## Images



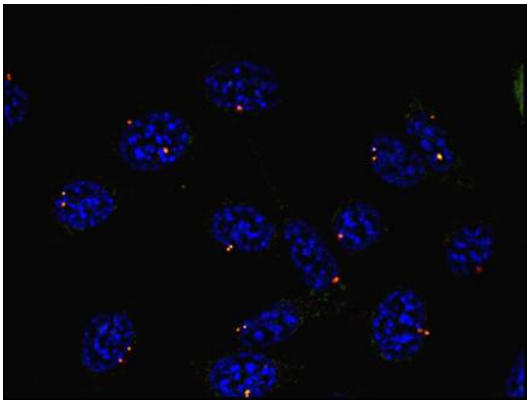

ARG62989 anti-gamma Tubulin antibody [TU-30] WB image

Western blot: Human gamma Tubulin isotypes. (A) SH-SY5Y total cell lysate, expressing TagRFP-tagged γ-Tb1 or γ-Tb2. (B) GST-tagged C-terminal region (aa. 362-451) of γ-Tb1 or γ-Tb2. The blots were stained with ARG62989 anti-gamma Tubulin antibody [TU-30].



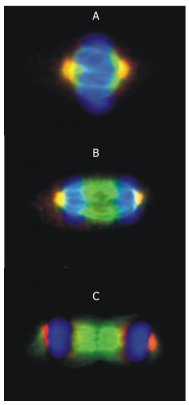
ARG62989 anti-gamma Tubulin antibody [TU-30] ICC/IF image

Immunofluorescence: P19X1 mouse embryonal carcinoma cells stained with ARG62989 anti-gamma Tubulin antibody [TU-30] (red). Cell nuclei was stained with DAPI (blue).



ARG62989 anti-gamma Tubulin antibody [TU-30] ICC/IF image

Immunofluorescence: Mouse fibroblasts stained with ARG62989 anti-gamma Tubulin antibody [TU-30] (green).
Cell nuclei was stained with DAPI (blue).




ARG62989 anti-gamma Tubulin antibody [TU-30] ICC/IF image

Immunofluorescence: 3T3 mouse fibroblasts stained with ARG62989 anti-gamma Tubulin antibody [TU-30] (red).
Co-stained with alpha-tubulin (green) and DAPI (blue). A - metaphase; B - anaphase; C - telophase.