

# ARG62990 anti-gamma Tubulin antibody [TU-32]

Package: 100 μg Store at: -20°C

Summary	
Product Description	Mouse Monoclonal antibody [TU-32] recognizes gamma Tubulin
Tested Reactivity	Hu, Ms, Rat, Mamm, Pint, Prt
Tested Application	ICC/IF, WB
Specificity	The clone TU-32 recognizes an epitope (amino acids 434-449 in human) within C-terminus of gamma- Tubulin, a 48 kDa structural constituent of cytoskeleton and microtubule organizing center (MTOC).
Host	Mouse
Clonality	Monoclonal
Clone	TU-32
Isotype	lgG1
Target Name	gamma Tubulin
Species	Human
Immunogen	Synthetic peptide around aa. 434-449 of Human gamma Tubulin. (EYHAATRPDYISWGTQ)
Epitope	The epitope was located in the aminoacid sequence PDYISW (aa441-446 in human), which is identical for gamma-tubulin 1 and 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
	ICC/IF	Assay-dependent
	WB	1 μg/ml
Application Note	ICC/IF: Methanol/acetone fixation required. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

## Properties

Form	Liquid
Purification	Purified from cell culture supernatant by protein-A affinity chromatography.
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	
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 microtubule 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]
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



#### ARG62990 anti-gamma Tubulin antibody [TU-32] WB image

Western blot: Human gamma Tubulin isotypes. (A) SH-SY5Y total cell lysate, expressing TagRFP-tagged  $\gamma$ -Tb1 or  $\gamma$ -Tb2. (B) GST-tagged C-terminal region (aa. 362-451) of  $\gamma$ -Tb1 or  $\gamma$ -Tb2. The blots were stained with ARG62990 anti-gamma Tubulin antibody [TU-32].



### ARG62990 anti-gamma Tubulin antibody [TU-32] WB image

Western blot: Porcine brain lysate stained with ARG62990 antigamma Tubulin antibody [TU-32].