

## Human/Mouse/Rat α Tubulin Antibody

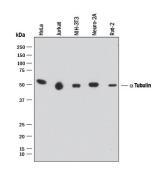
Monoclonal Mouse IgG<sub>2A</sub> Clone # 961216 Catalog Number: MAB9344

DESCRIPTION			
Species Reactivity	Human/Mouse/Rat		
Specificity	Detects human α Tubulin in direct ELISAs and Western blots.		
Source	Monoclonal Mouse IgG <sub>2A</sub> Clone # 961216		
Purification	Protein A or G purified from hybridoma culture supernatant		
Immunogen	Human TUBA1A synthetic peptide Accession # Q71U36		
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.		

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

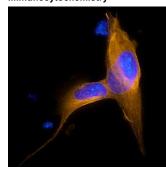
	Recommended Concentration	Sample
Western Blot	0.05 μg/mL	See Below
Immunocytochemistry	8-25 μg/mL	See Below
Immunohistochemistry	5-25 μg/mL	See Below

#### Western Blot



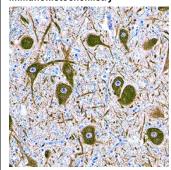
Detection of Human, Mouse, and Rat α Tubulin by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line, Jurkat human acute T cell leukemia cell line, NIH-3T3 mouse embryonic fibroblast cell line, Neuro-2A mouse neuroblastoma cell line, and Rat-2 rat embryonic fibroblast cell line. PVDF membrane was probed with 0.05  $\mu g/mL$  of Mouse Anti-Human/Mouse/Rat α Tubulin Monoclonal Antibody (Catalog # MAB9344) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for  $\alpha$  Tubulin at approximately 52 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

### Immunocytochemistry



α Tubulin in SH-SY5Y Human Cell Line. α Tubulin was detected in immersion fixed SH-SY5Y human neuroblastoma cell line using Mouse Anti-Human/Mouse/Rat α Tubulin Monoclonal Antibody (Catalog # MAB9344) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (yellow; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

### Immunohistochemistry



 $\alpha$  Tubulin in Human Brain.  $\alpha$  Tubulin was detected in immersion fixed paraffinembedded sections of human brain using Mouse Anti-Human/Mouse/Rat α Tubulin Monoclonal Antibody (Catalog # MAB9344) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to neuronal cytoplasm. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.

#### PREPARATION AND STORAGE

Reconstitution Reconstitute at 0.5 mg/mL in sterile PBS.

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

\*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

#### Stability & Storage

#### Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

Rev. 2/7/2018 Page 1 of 2





# Human/Mouse/Rat α Tubulin Antibody

Monoclonal Mouse IgG<sub>2A</sub> Clone # 961216 Catalog Number: MAB9344

#### BACKGROUND

Tubulin alpha-1A chain (TUBA1A), also known as Alpha-tubulin 3, is the principal alpha tubulin in morphologically differentiated neurons. Alpha tubulin dimerizes with beta Tubulin to form microtubules. Microtubules mediate transport of proteins and endosomes within cells, and TUBA1A has been shown to interact with metabotropic glutamate receptor 7 (receptor trafficking), synuclein alpha (synaptic plasticity), and N-syndecan (neurite outgrowth). This gene is mutated in malformations of cortical development, including Lissencephaly resulting in microcephaly, developmental delay and early-onset epileptic seizures.

Rev. 2/7/2018 Page 2 of 2

