

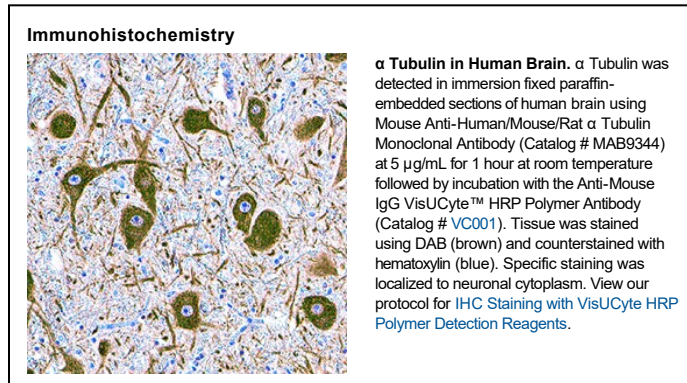
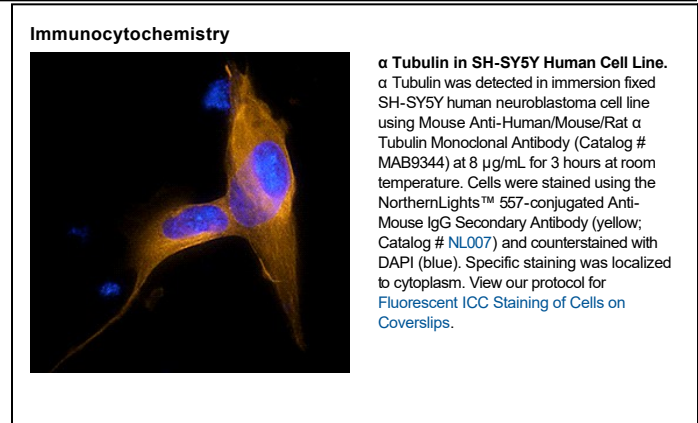
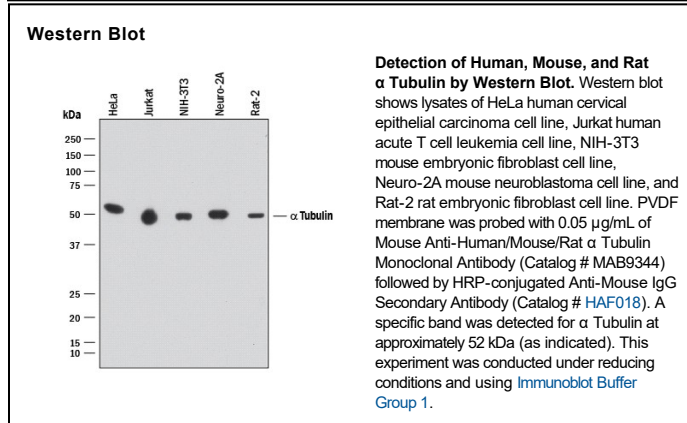
DESCRIPTION	
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human $\alpha$ Tubulin in direct ELISAs and Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 961216
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Human TUBA1A synthetic peptide Accession # Q71U36
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m 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 $\mu$ m filtered solution in PBS.

## APPLICATIONS

**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
<b>Western Blot</b>	0.05 $\mu$ g/mL	See Below
<b>Immunocytochemistry</b>	8-25 $\mu$ g/mL	See Below
<b>Immunohistochemistry</b>	5-25 $\mu$ g/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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.