



## Tubulin $\alpha$ Polyclonal Antibody

Cat #: ABP52655

Size: 30 $\mu$ l /100 $\mu$ l /200 $\mu$ l

### Product Information

	<b>Product Name:</b> Tubulin $\alpha$ Polyclonal Antibody		
	<b>Applications:</b> WB, IHC-P, IF, ELISA		<b>Isotype:</b> Rabbit IgG
	<b>Reactivity:</b> Human, Mouse, Rat		
<b>REF</b>	<b>Catalog Number:</b> ABP52655	<b>LOT</b>	<b>Lot Number:</b> Refer to product label
	<b>Formulation:</b> Liquid		<b>Concentration:</b> 1 mg/ml
	<b>Storage:</b> Store at -20°C. Avoid repeated freeze / thaw cycles.		<b>Note:</b> Contain sodium azide.

**Background:** Microtubules of the eukaryotic cytoskeleton perform essential and diverse functions and are composed of a heterodimer of alpha and beta tubulins. TUBA1A encoding these microtubule constituents belong to the tubulin superfamily, which is composed of six distinct families. Genes from the alpha, beta and gamma tubulin families are found in all eukaryotes. The alpha and beta tubulins represent the major components of microtubules, while gamma tubulin plays a critical role in the nucleation of microtubule assembly. There are multiple alpha and beta tubulin genes, which are highly conserved among species. This gene encodes alpha tubulin and is highly similar to the mouse and rat Tuba1 genes. Northern blotting studies have shown that the gene expression is predominantly found in morphologically differentiated neurologic cells. This gene is one of three alpha-tubulin genes in a cluster on chromosome 12q. Mutations in this gene cause lissencephaly type 3 (LIS3) - a neurological condition characterized by microcephaly, mental retardation, and early-onset epilepsy and caused by defective neuronal migration. Alternative splicing results in multiple transcript variants encoding distinct isoforms.

**Application Notes:** Optimal working dilutions should be determined experimentally by the investigator. Suggested starting dilutions are as follows: WB (1:500-1:2000), IHC-P (1:100-1:300), IF (1:200-1:1000), ELISA (1:5000). Not yet tested in other applications.

**Storage Buffer:** PBS containing 50% Glycerol, 0.5% BSA and 0.02% Sodium Azide.

**Storage Instructions:** Stable for one year at -20°C from date of shipment. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Aliquot to avoid repeated freezing and thawing.

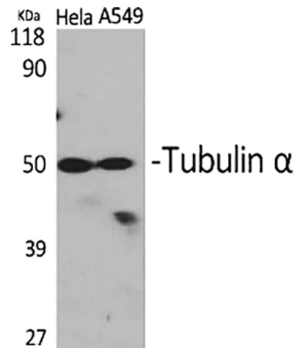


Fig.1. Western Blot analysis of HeLa (1), A549 (2), diluted at 1:2000.

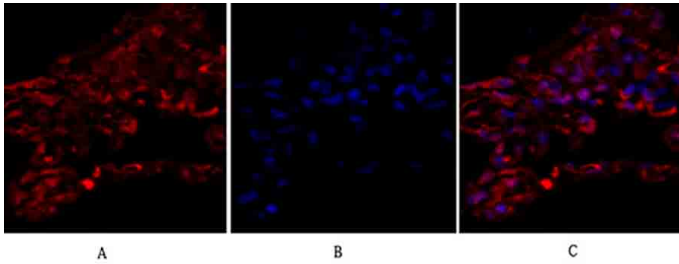


Fig.2. Immunofluorescence analysis of human lung tissue. 1, Tubulin  $\alpha$  Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 Labeled secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B.

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