

## Basic Information

<b>Product Name</b>	Anti-Alpha Tubulin/TUBA1A Antibody (Clone#OTI2C8)
<b>Gene Name</b>	TUBA1A
<b>Source</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	IgG2b
<b>Species Reactivity</b>	human, mouse, rat, dog, monkey
<b>Tested Application</b>	IHC, WB
<b>Contents</b>	PBS (PH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
<b>Immunogen</b>	Full length human recombinant protein of human TUBA1A(NP_006000) produced in HEK293T cell
<b>Concentration</b>	500 ug/ml
<b>Purification</b>	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
<b>Observed MW</b>	50 kDa
<b>Dilution Ratios</b>	Western blot (WB): 1:400~4000 Immunohistochemistry (IHC):1:150

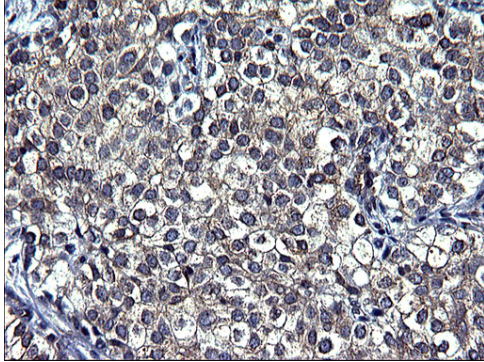
## Storage

Stable for 12 months from date of receipt. Store at -20°C as received.

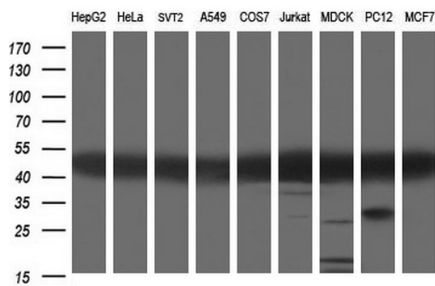
## Background Information

Microtubules of the eukaryotic cytoskeleton perform essential and diverse functions and are composed of a heterodimer of alpha and beta tubulins. The genes 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. [provided by RefSeq, Jul 2012]

## Selected Validation Data



Immunohistochemical staining of paraffin-embedded Carcinoma of Human liver tissue using anti-TUBA1A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, M03989-4)



Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-TUBA1A monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).