

### Product datasheet for TA506605BM

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

#### alpha Tubulin (TUBA1A) Mouse Monoclonal Antibody (HRP conjugated) [Clone ID: OTI2C8]

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: OTI2C8
Applications: IHC, WB

Recommended Dilution: WB 1:400~4000, IHC 1:150

Reactivity: Human, Dog, Rat, Monkey, Mouse

Host: Mouse Isotype: IgG2b

Clonality: Monoclonal

**Immunogen:** Full length human recombinant protein of human TUBA1A(NP\_006000) produced in HEK293T

cell

**Formulation:** PBS (pH 7.3) containing 1% BSA, 50% glycerol.

Concentration: 0.5 mg/ml

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: HRP

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Predicted Protein Size:** 50 kDa

**Gene Name:** tubulin alpha 1a

Database Link: NP 006000

Entrez Gene 22142 MouseEntrez Gene 64158 RatEntrez Gene 608147 DogEntrez Gene 574194

MonkeyEntrez Gene 7846 Human

Q71U36





# alpha Tubulin (TUBA1A) Mouse Monoclonal Antibody (HRP conjugated) [Clone ID: OTI2C8] – TA506605BM

Background:

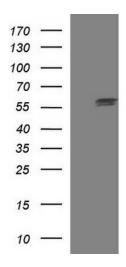
Microtubules of the eukaryotic cytoskeleton perform essential and diverse functions and are composed of a heterodimer of alpha and beta tubulins. The genes encoding these microtubule constituents belong to the tubulin superfamily, which is composed of six distinct families. Genes from the alpha, beta 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]

Synonyms: B-ALPHA-1; LIS3; TUBA3

**Protein Families:** Druggable Genome

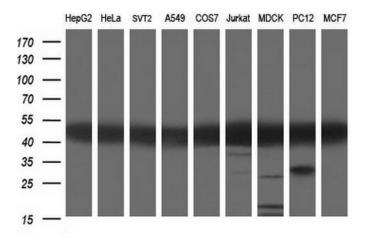
**Protein Pathways:** Gap junction, Pathogenic Escherichia coli infection

## **Product images:**

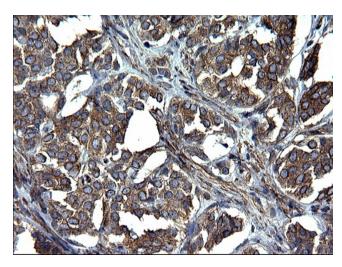


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TUBA1A (Cat# [RC208669], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TUBA1A(Cat# [TA506605]). Positive lysates [LY416932] (100ug) and [LC416932] (20ug) can be purchased separately from OriGene.

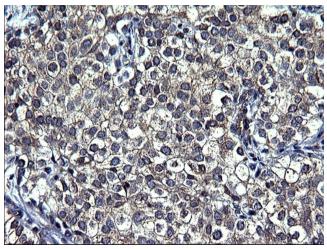




Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-TUBA1A monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).

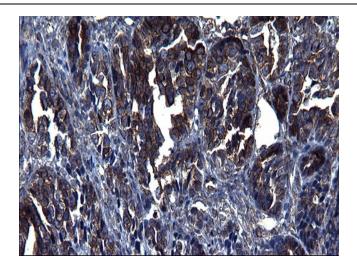


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human breast tissue using anti-TUBA1A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA506605])

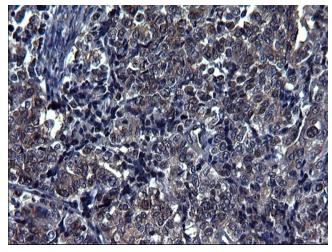


Immunohistochemical staining of paraffinembedded Carcinoma of Human liver tissue using anti-TUBA1A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA506605])

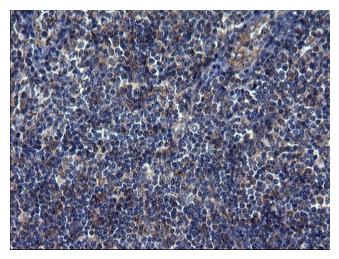




Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human ovary tissue using anti-TUBA1A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA506605])



Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human endometrium tissue using anti-TUBA1A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA506605])



Immunohistochemical staining of paraffinembedded Human lymph node tissue within the normal limits using anti-TUBA1A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA506605])