

ARG45048 anti-TUBA1A antibody [RM444]

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit monoclonal [RM444] recognizes TUBA1A.
Tested Reactivity	Hu
Tested Application	ICC/IF, WB
Specificity	This antibody reacts to dTyr alpha Tubulin
Host	Rabbit
Clonality	Monoclonal
Clone	RM444
Isotype	IgG
Target Name	TUBA1A
Immunogen	A peptide corresponding to human dTyr α-tubulin
Conjugation	Un-conjugated
Alternate Names	TUBA1A; Tubulin Alpha 1a; TUBA3; B-ALPHA-1; Tubulin, Alpha, Brain-Specific; Tubulin Alpha-1A Chain; ubulin Alpha-3 Chain; Tubulin B-Alpha-1; FLJ25113; Alpha-Tubulin 3; Hum-A-Tub1; Hum-A-Tub2; EC 3.6.5.-; LIS3

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:100 - 1:200
	WB	1:1000 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS with 50% Glycerol, 1% BSA and 0.09% sodium azide
Preservative	0.09% sodium azide
Stabilizer	50% Glycerol, 1% BSA and 0.09%
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

Gene Symbol	TUBA1A
Gene Full Name	Tubulin Alpha 1a
Background	<p>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 blot 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, intellectual disability, and early-onset epilepsy caused by defective neuronal migration. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2017]</p>
Function	<p>Tubulin is the major constituent of microtubules, a cylinder consisting of laterally associated linear protofilaments composed of alpha- and beta-tubulin heterodimers. Microtubules grow by the addition of GTP-tubulin dimers to the microtubule end, where a stabilizing cap forms. Below the cap, tubulin dimers are in GDP-bound state, owing to GTPase activity of alpha-tubulin. [Uniprot]</p>
PTM	<p>Acetylation, Isopeptide bond, Methylation, Nitration, Phosphoprotein. [Uniprot]</p>
Cellular Localization	<p>Cell projection, Cilium, Cytoplasm, Cytoskeleton, Flagellum, Microtubule. [Uniprot]</p>