



Tubulin α 1/3/4 Polyclonal Antibody

Catalog No	YP-Ab-03204
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;ELISA
Gene Name	TUBA1A
Protein Name	Tubulin alpha-1A chain
Immunogen	The antiserum was produced against synthesized peptide derived from human TUBA1/3/4. AA range:238-287
Specificity	Tubulin α 1/3/4 Polyclonal Antibody detects endogenous levels of Tubulin α 1/3/4 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	$\geq 90\%$
Storage Stability	-20°C/1 year
Synonyms	TUBA1A; TUBA3; Tubulin alpha-1A chain; Alpha-tubulin 3; Tubulin B-alpha-1; Tubulin alpha-3 chain; TUBA1B; Tubulin alpha-1B chain; Alpha-tubulin ubiquitous; Tubulin K-alpha-1; Tubulin alpha-ubiquitous chain; TUBA1C; TUBA6; Tubulin alpha-1C c
Observed Band	50-56kD
Cell Pathway	Cytoplasm, cytoskeleton.
Tissue Specificity	Expressed at a high level in fetal brain.
Function	disease:Defects in TUBA1A are the cause of lissencephaly type 3 (LIS3) [MIM:611603]. LIS is characterized by a smooth brain surface due to the absence (agyria) or reduction (pachygyria) of surface convolutions. It is often associated with psychomotor retardation and seizures. LIS3 features include agyria or pachygyria or laminar heterotopia, severe mental retardation, motor delay, variable presence of seizures, and abnormalities of corpus callosum, hippocampus, cerebellar vermis and brainstem.,function:Tubulin is the major constituent of microtubules. It binds two moles of GTP, one at an exchangeable site on the beta chain and one at a non-exchangeable site on the alpha-chain.,PTM:Undergoes a tyrosination/detyrosination cycle, the cyclic removal and re-addition of a C-terminal tyrosine residue by the enzymes tubulin



tyrosine carboxypeptidase (TTCP) and tubulin tyrosine ligase (TTL), resp

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.

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

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