Best Tools for immunology Research

α-tubulin Polyclonal Antibody

Catalog No :	YN5437
Reactivity :	Human;Mouse;Rat
Applications :	WB
Target :	Tubulin α
Fields :	>>Phagosome;>>Apoptosis;>>Tight junction;>>Gap junction;>>Alzheimer disease;>>Parkinson disease;>>Amyotrophic lateral sclerosis;>>Huntington disease;>>Prion disease;>>Pathways of neurodegeneration - multiple diseases;>>Pathogenic Escherichia coli infection;>>Salmonella infection
Gene Name :	TUBA1A
Protein Name :	Tubulin alpha-1A chain
Human Gene Id :	7846/10376
Human Swiss Prot No :	Q71U36/P68363
Mouse Gene Id :	22142/22143
Rat Gene Id :	64158/500929
Rat Swiss Prot No :	P68370/Q6P9V9
Immunogen :	Recombinant Protein of Tubulin alpha-1A chain
Specificity :	The antibody detects endogenous α-tubulin protein.
Formulation :	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:2000

Purification : The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 52kD

Cell Pathway : Gap junction;Pathogenic Escherichia coli infection;

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.

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

Subcellular Location : Cytoplasm, cytoskeleton.

Expression : Expressed at a high level in fetal brain.

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