Tubulin α (Acetyl Lys112) Polyclonal Antibody

Catalog No :	YK0045
Reactivity :	Human;Mouse;Rat
Applications :	WB;ELISA
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/TUBA1B/TUBA1C
Protein Name :	Tubulin alpha-1A chain/Tubulin alpha-1B chain/Tubulin alpha-1C chain
Human Gene Id :	7846/10376/84790
Human Swiss Prot No :	Q71U36/P68363/Q9BQE3
Mouse Gene Id :	22142/22143/22146
Rat Gene Id :	64158/500929/100909441
Rat Swiss Prot No :	P68370/Q6P9V9/Q6AYZ1
Immunogen :	Synthesized acetyl-peptide derived from human Tubulin α around the acetylation site of K112.
Specificity :	Acetyl-Tubulin α (K112) Polyclonal Antibody detects endogenous levels of Tubulin α protein only when acetylated at K112.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. ELISA: 1:20000. Not yet tested in other applications.

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

Concentration : 1 mg/ml

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

Observed Band : 50kD

Cell Pathway : Gap junction;Pathogenic Escherichia coli infection;

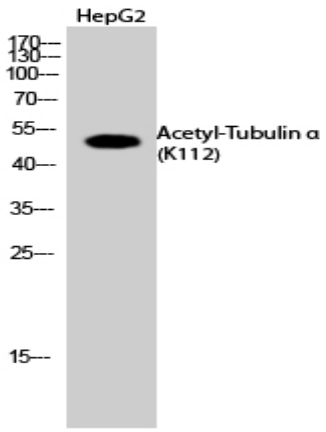
Background : Microtubules of the eukaryotic cytoskeleton perform essential and diverse functions and are composed of a heterodimer of alpha and beta tubulins. The genes encoding these microtubule constituents belong to the tubulin superfamily, which is composed of six distinct families. Genes from the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

Products Images



Western Blot analysis of HepG2 cells using Acetyl-Tubulin α (K112) Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000