Summary

Production Name	Tubulin α Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC,
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	TUBA1A/TUBA1B/TUBA1C/TUBA3C/TUBA4A
Alternative Names	TUBA1A; TUBA3; Tubulin alpha-1A chain; Alpha-tubulin 3; Tubulin B-alpha-1; Tubulin alpha-3 chain; TUBA1B; Tubulin alpha-1B chain; Alpha-tubulin ubiquitousTubulin K-alpha-1; Tubulin alpha-ubiquitous chain; TUBA1C; TUBA6; Tubulin alpha-1C chain; Alpha-tubulin 6; Tubulin alpha-6 chain
Gene ID	7846/10376/84790/113457/7278/7277
SwissProt ID	Q71U36/P68363/Q9BQE3/Q13748/P68366.Synthesized peptide derived from human Tubulin α around the non-acetylation site of K163.

Application

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Dilution Ratio	WB 1:500 - 1:2000. IHC-p: 1:100-1:300. ELISA: 1:20000..
Molecular Weight	50kD

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.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), respectively.,similarity:Belongs to the tubulin family.,subunit:Dimer of alpha and beta chains.,tissue specificity:Expressed at a high level in fetal brain.,
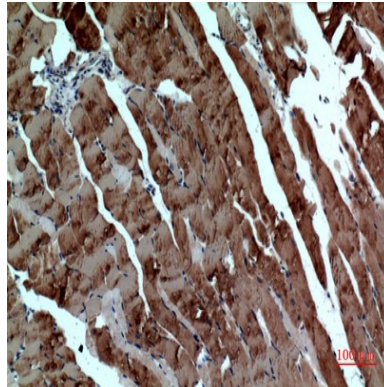
Research Area

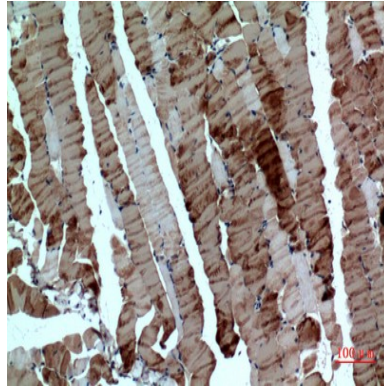Gap junction;Pathogenic Escherichia coli infection;

Image Data
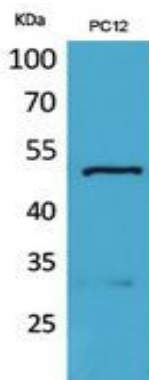
Western Blot analysis of PC12 cells using Tubulin α Polyclonal Antibody.. Secondary antibody was diluted at 1:20000
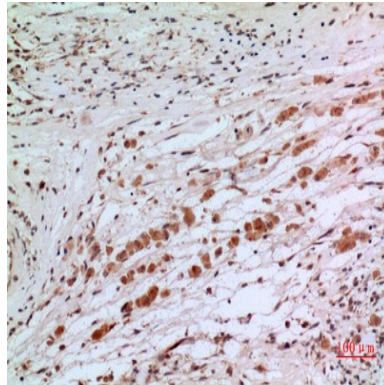
Immunohistochemical analysis of paraffin-embedded mouse-muscle, antibody was diluted at 1:100

Immunohistochemical analysis of paraffin-embedded mouse-muscle, antibody was diluted at 1:100

Immunohistochemical analysis of paraffin-embedded human-brain, antibody was diluted at 1:100

Note

For research use only.