



α-tubulin Monoclonal Antibody(8F11)

Catalog No	YP-Ab-02969
Isotype	IgG
Reactivity	Human;Rat;Mouse;Fruit fly
Applications	WB;IHC;IF;IP
Gene Name	TUBA1A
Immunogen	Recombinant Protein of Tubulin alpha-1A chain
Specificity	The antibody detects endogenousα-tubulin protein.
Formulation	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Dilution	WB: 1:500-10000 IP:1:200 IF 1:200 IHC 1:50-300
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	TUBA1B;Tubulin alpha 1B chain;1G7;Alpha-tubulin ubiquitous;EC:3.6.5;Tubulin α;TUBA1A;Tubulin alpha-1A chain
Observed Band	52kD
Calculated Molecular Weight	52kD
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

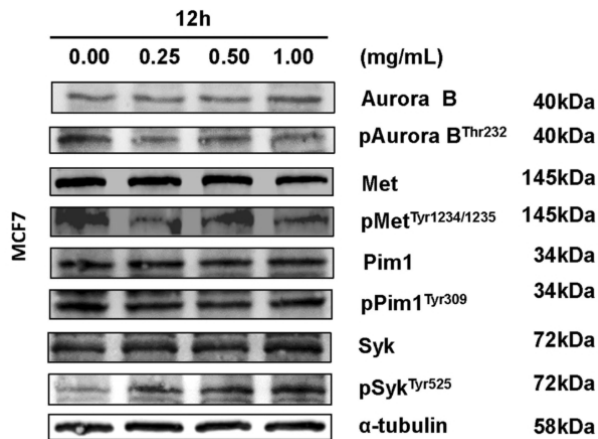
Avoid repeated freezing and thawing!

Usage suggestions

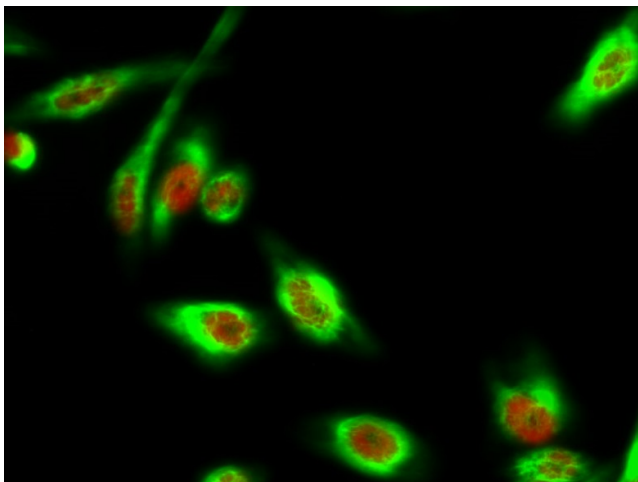
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



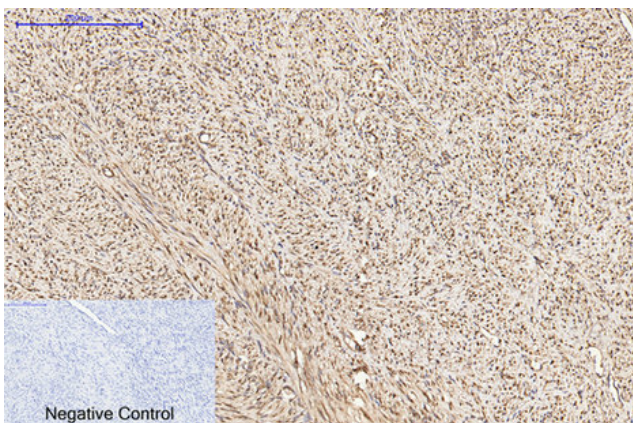
Products Images



Wang, T., Liang, L., Zhao, C. et al. Elucidating direct kinase targets of compound Danshen dropping pills employing archived data and prediction models. Sci Rep 11, 9541 (2021).

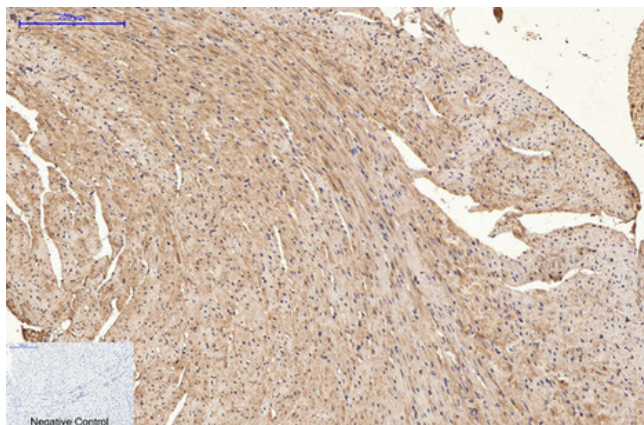


Immunofluorescence analysis of Hela cell. 1, DPK3 (phospho Thr265) Polyclonal Antibody (red) was diluted at 1:200 (4°C overnight). α-tubulin Monoclonal Antibody (8F11) (green) was diluted at 1:200 (4°C overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog: RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog: RS3208 was diluted at 1:1000 (room temperature, 50min).



Immunohistochemical analysis of paraffin-embedded Human-uterus-cancer tissue. 1, α-tubulin Monoclonal Antibody (8F11) was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.

Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1, α-tubulin Monoclonal Antibody (8F11) was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Mouse-heart tissue. 1, α -tubulin Monoclonal Antibody(8F11) was diluted at 1:200(4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.