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TBB1 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM1013A

Product Information

Application	WB, IHC-P, IF, E
Primary Accession	Q9H4B7
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG1
Clone Names	86CT4.4.4
Calculated MW	50327

Additional Information

Gene ID	81027
Other Names	Tubulin beta-1 chain, TUBB1
Target/Specificity	This monoclonal antibody is generated from mice immunized with a recombinant protein human TBB1.
Dilution	WB~~1:500~1000 IHC-P~~1:100~500 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TBB1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TUBB1
Function	Tubulin is the major constituent of microtubules, a cylinder consisting of laterally associated linear protofilaments composed of alpha- and beta-tubulin heterodimers. Microtubules grow by the addition of GTP-tubulin dimers to the microtubule end, where a stabilizing cap forms. Below the cap, tubulin dimers are in GDP-bound state, owing to GTPase activity of alpha-tubulin.

Cellular Location	Cytoplasm, cytoskeleton
Tissue Location	Hematopoietic cell-specific. Major isotype in leukocytes, where it represents 50% of all beta-tubulins

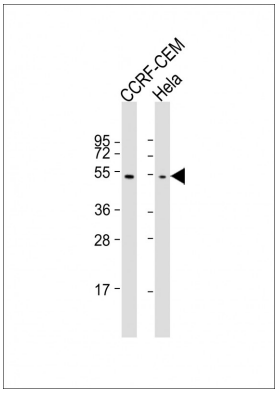
Background

This gene encodes a member of the beta tubulin protein family. Beta tubulins are one of two core protein families (alpha and beta tubulins) that heterodimerize and assemble to form microtubules. This protein is specifically expressed in platelets and megakaryocytes and may be involved in proplatelet production and platelet release. A mutations in this gene is associated with autosomal dominant macrothrombocytopenia. Two pseudogenes of this gene are found on chromosome Y.

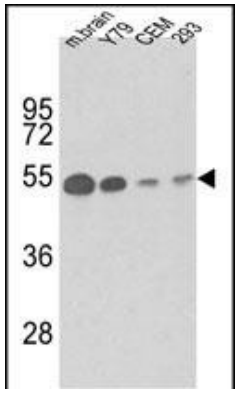
References

Study of 18 functional hemostatic polymorphisms in mucocutaneous bleeding disorders. Antón AI, et al. Ann Hematol, 2010 Nov. PMID 20532885.
Natural product derivative Bis(4-fluorobenzyl)trisulfide inhibits tumor growth by modification of beta-tubulin at Cys 12 and suppression of microtubule dynamics. Xu W, et al. Mol Cancer Ther, 2009 Dec. PMID 19996274.
Genotype-phenotype relationship for six common polymorphisms in genes affecting platelet function from 286 healthy subjects and 160 patients with mucocutaneous bleeding of unknown cause. Martínez C, et al. Br J Haematol, 2009 Jun. PMID 19388931.
TUBB1 Q43P polymorphism does not protect against acute coronary syndrome and premature myocardial infarction. Navarro-Nú ez L, et al. Thromb Haemost, 2008 Dec. PMID 19132255.
Roles of beta-tubulin residues Ala428 and Thr429 in microtubule formation in vivo. Joe PA, et al. J Biol Chem, 2009 Feb 13. PMID 19074767.

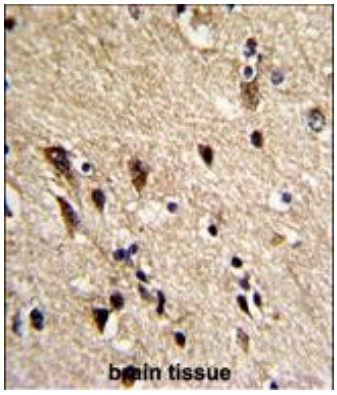
Images



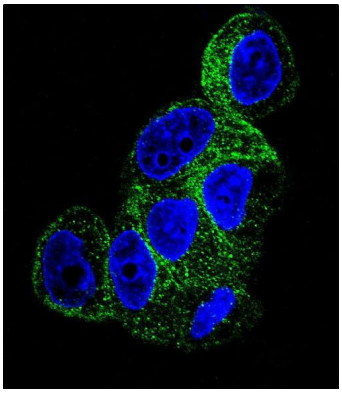
All lanes : Anti-TBB1 Antibody at 1:1000 dilution Lane 1: CCRF-CEM whole cell lysate Lane 2: Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 50 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of anti-TBB1 Antibody (Cat. #AM1013a) in mouse brain tissue, Y79, CEM and 293 lysates (35µg/lane). TBB1 (arrow) was detected using the purified Mab.(1µg/ml)



Formalin-fixed and paraffin-embedded human brain reacted with TBB1 Antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Confocal immunofluorescent analysis of TBB1 Antibody (Cat#AM1013a) with HepG2 cell followed by Alexa Fluor® 488-conjugated goat anti-mouse lgG (green). DAPI was used to stain the cell nuclear (blue).