

TUBB2A Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1798a

Specification

TUBB2A Antibody - Product Information

WB, FC, E Application **Primary Accession** 013885 Reactivity Human Host Mouse Clonality Monoclonal Isotype laG1 50kDa KDa Calculated MW Description 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.

Immunogen Purified recombinant fragment of human TUBB2A (AA: 25-187) expressed in E. Coli.

Formulation Purified antibody in PBS with 0.05% sodium azide

TUBB2A Antibody - Additional Information

Gene ID 7280

Other Names Tubulin beta-2A chain, Tubulin beta class IIa, TUBB2A, TUBB2

Dilution WB~~1/500 - 1/2000 FC~~1/200 - 1/400 E~~1/10000

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions TUBB2A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TUBB2A Antibody - Protein Information

Name TUBB2A

Synonyms TUBB2



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.

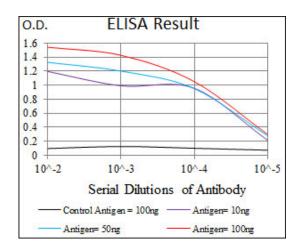
Cellular Location Cytoplasm, cytoskeleton.

Tissue Location High expression in brain, where it represents 30% of all beta-tubulins.

TUBB2A Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>



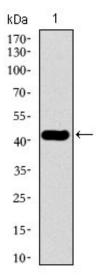


Figure 1: Western blot analysis using TUBB2A mAb against human TUBB2A recombinant protein. (Expected MW is 43.2 kDa)

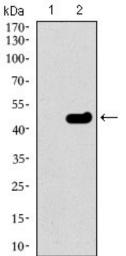


Figure 2: Western blot analysis using TUBB2A mAb against HEK293 (1) and TUBB2A (AA: 25-187)-hlgGFc transfected HEK293 (2) cell lysate.

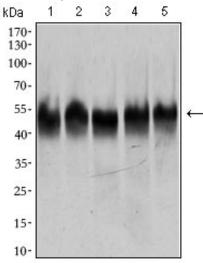


Figure 3: Western blot analysis using TUBB2A mouse mAb against HeLa (1), A549 (2), HEK293 (3), Jurkat (4) and PC-12 (5) cell lysate.



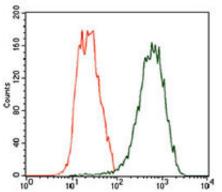


Figure 4: Flow cytometric analysis of Hela cells using TUBB2A mouse mAb (green) and negative control (red).

TUBB2A Antibody - Background

The protein encoded by this gene is a member of the keratin gene family. The type II cytokeratins consist of basic or neutral proteins which are arranged in pairs of heterotypic keratin chains coexpressed during differentiation of simple and stratified epithelial tissues. This type II cytokeratin is specifically expressed in the basal layer of the epidermis with family member KRT14. Mutations in these genes have been associated with a complex of diseases termed epidermolysis bullosa simplex. The type II cytokeratins are clustered in a region of chromosome 12q12-q13.

TUBB2A Antibody - References

1. Clin Cancer Res. 2012 Aug 15;18(16):4441-8. 2. Pathol Int. 2012 Apr;62(4):287-90.