10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TUBB3 Antibody (N-term) Blocking peptide

Synthetic peptide
Catalog # BP5752a

Specification

TUBB3 Antibody (N-term) Blocking peptide - Product Information

Primary Accession	Q13509
Other Accession	NP_006077.2

TUBB3 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 10381

Other Names
Tubulin beta-3 chain, Tubulin beta-4 chain, Tubulin beta-III, TUBB3, TUBB4

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

TUBB3 Antibody (N-term) Blocking peptide - Protein Information

Name TUBB3

Synonyms TUBB4

Function
Tubulin is the major constituent of microtubules, a cylinder consisting of laterally associated linear protofilaments composed of alpha- and beta-tubulin heterodimers (PubMed:34996871). Microtubules grow by the addition of GTP-tubulin dimers to the microtubule end, where a stabilizing cap forms (PubMed:34996871). Below the cap, tubulin dimers are in GDP-bound state, owing to GTPase activity of alpha- tubulin (PubMed:34996871). TUBB3 plays a critical role in proper axon guidance and maintenance (PubMed:20074521). Binding of NTN1/Netrin-1 to its receptor UNC5C might cause dissociation of UNC5C from polymerized TUBB3 in microtubules and thereby lead to increased microtubule dynamics and axon repulsion (PubMed:28483977). Plays a role in dorsal root ganglion axon projection towards the spinal cord (PubMed:28483977).

Cellular Location
Cytoplasm, cytoskeleton. Cell projection, growth cone {ECO:0000250|UniProtKB:Q9ERD7}. Cell projection, lamellipodium {ECO:0000250|UniProtKB:Q9ERD7}. Cell projection, filopodium {ECO:0000250|UniProtKB:Q9ERD7}

Tissue Location
Expression is primarily restricted to central and peripheral nervous system. Greatly increased expression in most cancerous tissues.

TUBB3 Antibody (N-term) Blocking peptide - Protocols

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

- Blocking Peptides

TUBB3 Antibody (N-term) Blocking peptide - Images

TUBB3 Antibody (N-term) Blocking peptide - Background

Beta III tubulin is abundant in the central and peripheral nervous systems (CNS and PNS) where it is prominently expressed during fetal and postnatal development. As exemplified in cerebellar and sympathoadrenal neurogenesis, the distribution of beta III is neuron-associated, exhibiting distinct temporospatial gradients according to the regional neuroepithelia of origin. However, transient expression of this protein is also present in the subventricular zones of the CNS comprising putative neuronal- and/or glial precursor cells, as well as in Kulchitsky neuroendocrine cells of the fetal respiratory epithelium. This temporally restricted, potentially non-neuronal expression may have implications in the identification of presumptive neurons derived from embryonic stem cells.

TUBB3 Antibody (N-term) Blocking peptide - References

Khan, I.A., et al. Biochemistry 35(12):3704-3711(1996)Khan, I.A., et al. Biochemistry 35(12):3704-3711(1996)Vinores, S.A., et al. Exp. Eye Res. 60(4):385-400(1995)