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Anti-Beta III Tubulin Picoband Antibody

Catalog # ABO10218

Specification

Anti-Beta III Tubulin Picoband Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	Q13509
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Tubulin beta-3 chain(TUBB3) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Beta III Tubulin Picoband Antibody - Additional Information

Gene ID 10381

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

Calculated MW
50433 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization
Cytoplasm, cytoskeleton.

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

Protein Name
Tubulin beta-3 chain

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human Beta III Tubulin (383-412aa EQFTAMFRRKAFLHWYTGEGMDEMEFTEAE), identical to the related mouse and rat sequences.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-Beta III Tubulin Picoband Antibody - Protein Information

Name TUBB3

Synonyms TUBB4

Function
Tubulin is the major constituent of microtubules, protein filaments consisting of alpha- and beta-tubulin heterodimers (PubMed:34996871, PubMed:38305685, PubMed:38609661). Microtubules grow by the addition of GTP-tubulin dimers to the microtubule end, where a stabilizing cap forms (PubMed:34996871, PubMed:38305685, PubMed:38609661). Below the cap, alpha-beta tubulin heterodimers are in GDP-bound state, owing to GTPase activity of alpha-tubulin (PubMed:34996871, PubMed:38609661). 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.

Anti-Beta III Tubulin Picoband Antibody - Protocols

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

- Western Blot

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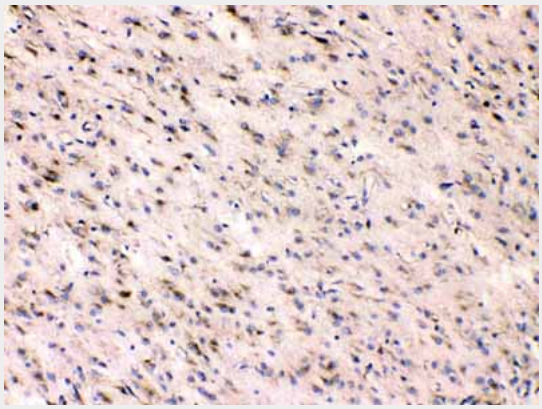
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Beta III Tubulin Picoband Antibody - Images

Western blot analysis of Beta III Tubulin expression in rat brian extract (lane 1), mouse brain extract (lane 2) and HELA whole cell lysates (lane 3). Beta III Tubulin at 55KD was detected using rabbit anti- Beta III Tubulin Antigen Affinity purified polyclonal antibody (Catalog # ABO10218) at 0.5 Î¼g/mL. The blot was developed using chemiluminescence (ECL) method .



Beta III Tubulin was detected in paraffin-embedded sections of human glioma tissues using rabbit anti- Beta III Tubulin Antigen Affinity purified polyclonal antibody (Catalog # ABO10218) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .

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Beta III Tubulin was detected in paraffin-embedded sections of human mammary cancer tissues using rabbit anti- Beta III Tubulin Antigen Affinity purified polyclonal antibody (Catalog # ABO10218) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .

Anti-Beta III Tubulin Picoband Antibody - Background

Tubulin beta-3 chain is a protein that in humans is encoded by the TUBB3 gene. This gene encodes a class III 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 primarily expressed in neurons and may be involved in neurogenesis and axon guidance and maintenance. Mutations in this gene are the cause of congenital fibrosis of the extraocular muscles type 3. Alternate splicing results in multiple transcript variants. A pseudogene of this gene is found on chromosome 6.