

Anti-beta III Tubulin TUBB3 Rabbit Monoclonal Antibody
Catalog # ABO14219**Specification****Anti-beta III Tubulin TUBB3 Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC, IF, ICC, IP
Primary Accession	Q13509
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

Description

Anti-beta III Tubulin TUBB3 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP applications. This antibody reacts with Human, Mouse, Rat.

Anti-beta III Tubulin TUBB3 Rabbit Monoclonal 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

WB 1:2000-1:20000
IHC 1:50-1:200
ICC/IF 1:50-1:200
IP 1:50

Subcellular Localization

Cytoplasm, cytoskeleton.

Tissue Specificity

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

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human beta III Tubulin

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated

freeze-thaw cycles.

Anti-beta III Tubulin TUBB3 Rabbit Monoclonal Antibody - 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

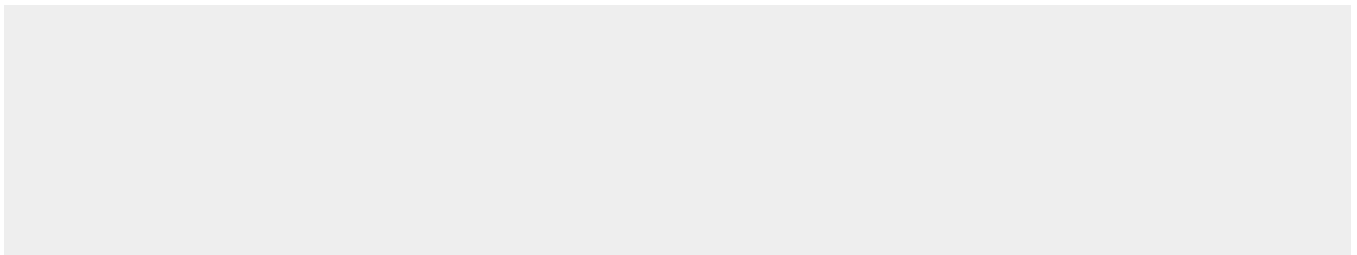
Expression is primarily restricted to central and peripheral nervous system. Greatly increased expression in most cancerous tissues.

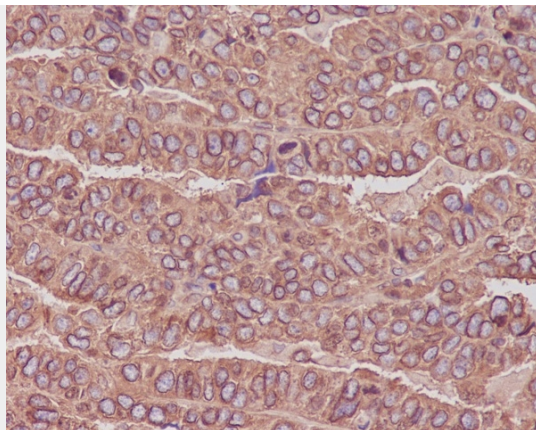
Anti-beta III Tubulin TUBB3 Rabbit Monoclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

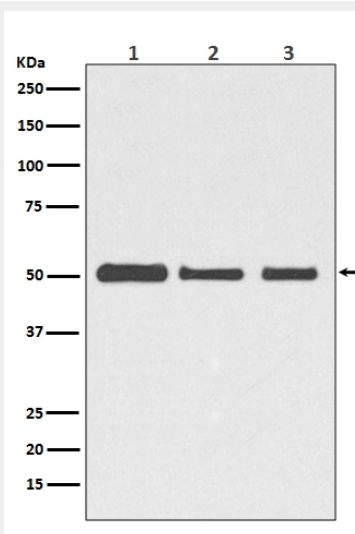
Anti-beta III Tubulin TUBB3 Rabbit Monoclonal Antibody - Images





Immunohistochemical analysis of paraffin-embedded human ovarian cancer, using beta III Tubulin Antibody(M01857)

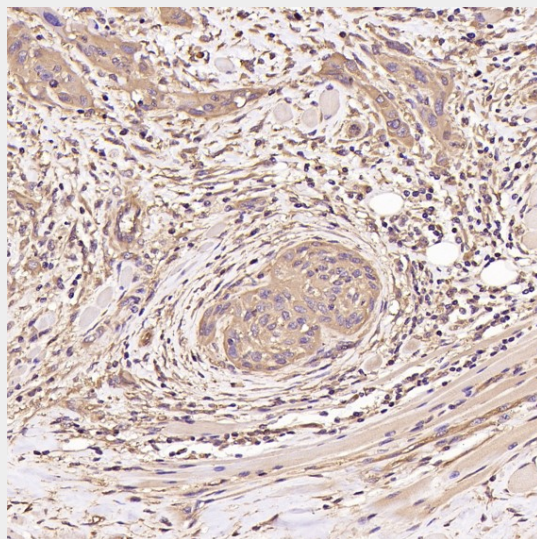
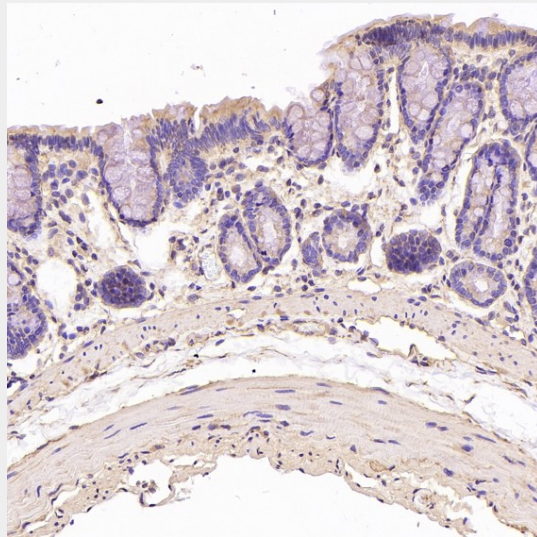
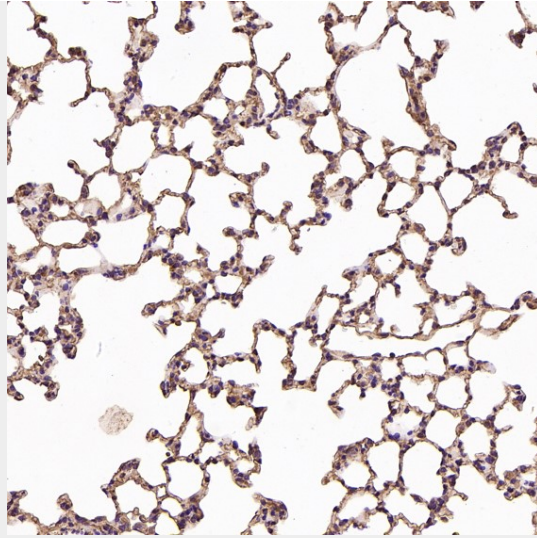
TUBB3 was detected in paraffin-embedded tissue section. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-TUBB3 Antibody (M01857)overnight at 4 Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

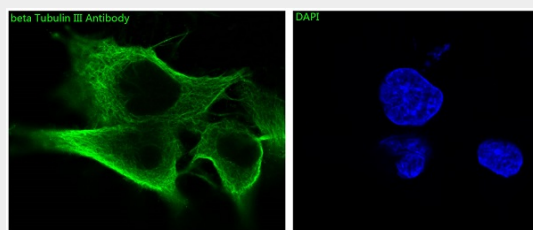
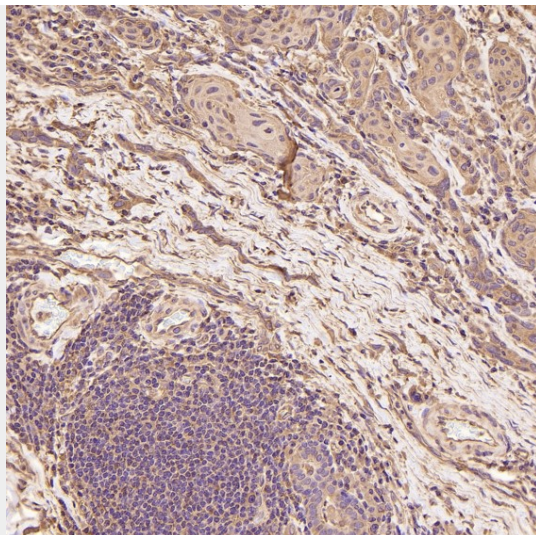


Western blot analysis of beta III Tubulin expression in HeLa cell lysate (M01857).

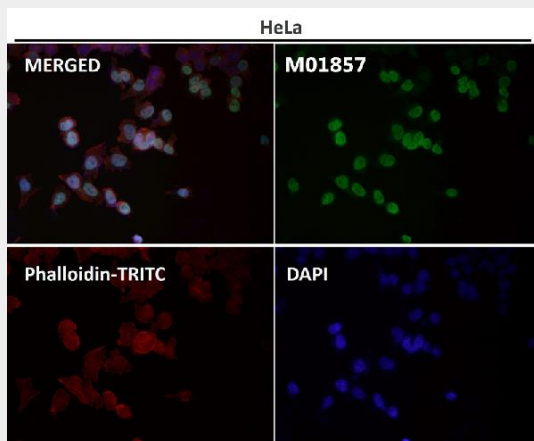
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-TUBB3 monoclonal antibody (Catalog # M01857) overnight at 4 then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for TUBB3





AB0042 Immunofluorescent analysis of PC12 cells, using beta Tubulin Antibody.



Immunofluorescent analysis using the Antibody at 1:50 dilution.