

Mouse anti-Rat Tubulin, beta III Monoclonal Antibody | anti-TUBB3 antibody

Anti-Beta III Tubulin

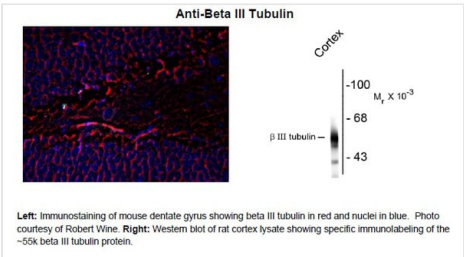
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA72750	Mouse	Rat	Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

Tubulin; beta III; Monoclonal Antibody; Anti-Beta III Tubulin; anti-TUBB3 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Rat
Clonality	Monoclonal
Isotype	IgG
Clone Number	AA10
Specificity	Specific for the ~55kDa beta III tubulin protein in Western Blot of rat brain extracts.
Purity/Purification	Protein G purified (Protein G purified culture supernatant.)
Form/Format	100 ul in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 ug per ml BSA and 50% glycerol. Adequate amount of material to conduct 10-mini Western Blots
Sequence Length	450
Applicable Applications for anti-TUBB3 antibody	IHC (Immunohistochemistry), WB (Western Blot)
Antigen	Synthetic peptide corresponding to beta III tubulin.
Immunogen Information	Synthetic peptide corresponding to amino acid residues specific to beta III tubulin conjugated to KLH
Immunogen Species	Rat
Species Reactivity Note	The antibody has been directly tested for reactivity in rat. It is expected that this antibody will have wide species cross reactivity.
Biological Significance	Tubulin is the major constituent of microtubules, existing as a heterodimer of the alpha and beta subunits. The beta III isoform of tubulin is found almost exclusively in neuronal processes of adult tissues and is therefore an excellent marker for neurons. Neuron specific, posttranslational modifications within the C-terminal domain of beta III tubulin have been shown to be developmentally regulated suggesting that they may serve to modulate the interaction of tubulin with microtubule associated proteins (Lee et al., 1990). Additionally, beta III tubulin has been found to be highly expressed in cancer cells such as small cell lung cancer, large cell neuroendocrine carcinoma and adenocarcinomas and is correlated with an increasing histological degree of malignancy (Katsetos et al., 2003)
Preparation and Storage	For long term storage -80 degree C is recommended, but shorter term storage at -20 degree C is also acceptable as aliquots may be taken without freeze/thawing due to the presence of 50% glycerol. Stock solutions are stable for a minimum of 1 year at -20 degree C.



Left: Immunostaining of mouse dentate gyrus showing beta III tubulin in red and nuclei in blue. Photo courtesy of Robert Wine. Right: Western blot of rat cortex lysate showing specific immunolabeling of the ~55k beta III tubulin protein.

Application Data

ADDITIONAL INFORMATION

Related Product Information for anti-TUBB3 antibody	Purified mouse monoclonal antibody
References	• Lee MK, Rebhun LI, Frankfurter A (1990) Posttranslational modification of class III beta tubulin. Proc Natl Acad Sci USA 87(18): 7195-7199. • Katsetos CD, Herman MM, Mork SJ (2003) Class III beta tubulin in human development and cancer. Cell Motil Cytoskeleton 55(2):77-96.

NCBI AND UNIPROT INFORMATION

NCBI GI #	145966774
NCBI GeneID	246118
NCBI Accession #	NP_640347.2
NCBI GenBank Nucleotide #	NM_139254.2
UniProt Accession #	Q4QRB4; Q8K5B6
NCBI Official Full Name	tubulin beta-3 chain
NCBI Official Synonym Full Names	tubulin, beta 3 class III
NCBI Official Symbol	Tubb3
NCBI Protein Information	tubulin beta-3 chain; neuron-specific class III beta-tubulin
UniProt Protein Name	Tubulin beta-3 chain
UniProt Gene Name	Tubb3
UniProt Entry Name	TBB3_RAT

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/tubulin-beta-iii-antibody-clone-aa10-immunohistochemistry-western-blot-elisa/72750>