

**Beta III Tubulin Antibody**  
**Mouse monoclonal antibody**  
**Catalog # AN1163****Specification**

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**Beta III Tubulin Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">Q4ORB4</a>
Reactivity	Rat
Host	Mouse
Clonality	monoclonal
Isotype	IgG
Calculated MW	55 KDa

**Beta III Tubulin Antibody - Additional Information**

Gene ID	246118
Gene Name	TUBB3
<b>Other Names</b>	
Tubulin beta-3 chain, Neuron-specific class III beta-tubulin, Tubb3	

**Target/Specificity**

Synthetic peptide corresponding to amino acid residues specific to beta III tubulin conjugated to KLH.

**Dilution**

WB~~ 1:10000

IHC~~ 1:1000

**Format**

Protein G purified culture supernatant.

**Antibody Specificity**

Specific for the ~55kDa beta III tubulin protein. This clone is similar to the monoclonal antibody Tuj1.

**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**

Beta III Tubulin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Shipping**

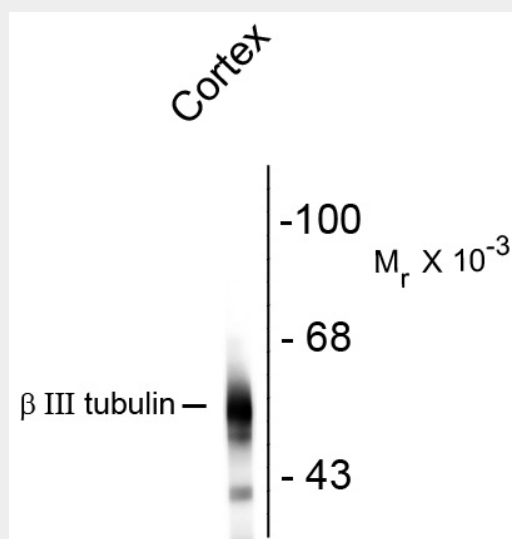
Blue Ice

**Beta III Tubulin Antibody - Protocols**

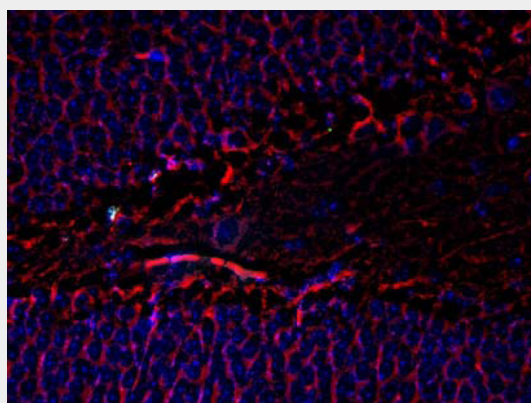
Provided below are standard protocols that you may find useful for product applications.

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

#### **Beta III Tubulin Antibody - Images**



Western blot of rat cortex lysate showing specific immunolabeling of the ~55k beta III tubulin protein.



Immunostaining of mouse dentate gyrus showing beta III tubulin in red and nuclei in blue.

#### **Beta III Tubulin Antibody - Background**

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)

#### **Beta III Tubulin 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.