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

Beta III Tubulin Antibody
Mouse monoclonal antibody
Catalog # AN1163

Specification

Beta III Tubulin Antibody - Product Information

Application	**WB, IHC**
Primary Accession	Q4QRB4
Reactivity	**Rat**
Host	**Mouse**
Clonality	**monoclonal**
Isotype	**IgG**
Calculated MW	**55 KDa**

Beta III Tubulin Antibody - Additional Information

Gene ID	**246118**
Gene Name	**TUBB3**

Other Names
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 themonoclonal 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

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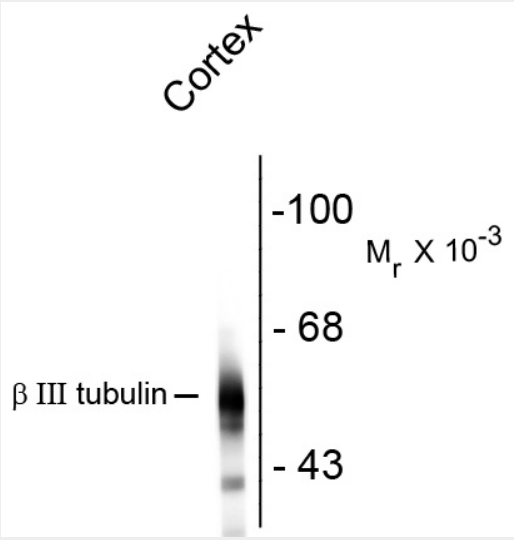
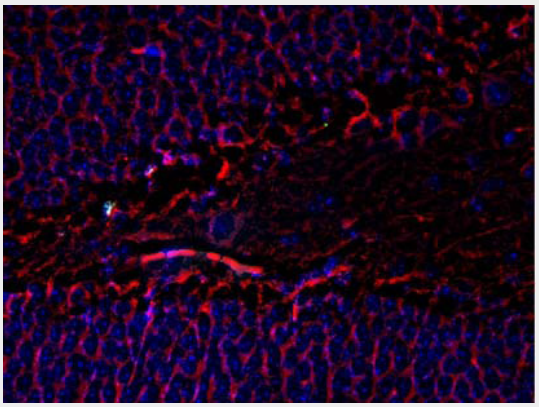
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- 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 α and β 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

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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.