## Tubulin, beta III, Mouse Monoclonal Antibody

# invitrogen ™

### Catalog no. 480011

(See product label for lot information)

#### **Product Description**

Mouse monoclonal antibody

Clone/PAD: AA10 Isotype: IgG Qty: 100µl

#### **Formulation**

10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per ml BSA and 50% glycerol.

#### **Purification Method**

Protein G purified culture supernatant.

#### **Validation**

See <u>www.invitrogen.com/antibodies</u> for protocols Validated for use in WB and IHC.

WB: 1: 10,000

#### Reactivity

This product had been directly tested for reactivity with Rat.

#### **Immunogen**

Synthetic peptide corresponding to beta III tubulin

#### Storage

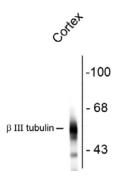
2-8°C for up to 1mo, -20°C for long term storage. Avoid repeated freezing and thawing.

#### **Expiration Date**

Expires one year from date of receipt when stored as instructed.

#### **Background**

Tubulin is the major constituent of microtubules, existing as a heterodimer of the a and b 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)



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

#### 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.