

**Mouse Anti-Tubulin III Beta [UBB3/3732]: MC0163, MC0163RTU7**

**Intended Use:** For Research Use Only

**Description:** Tubulin is a major cytoskeleton component that has five distinct forms, designated  $\alpha$ ,  $\beta$ ,  $\gamma$ ,  $\delta$  and  $\epsilon$  tubulin.  $\alpha$  and  $\beta$  Tubulins form heterodimers which multimerize to form a microtubule filament. Multiple  $\beta$  Tubulin isoforms ( $\beta 1$ ,  $\beta 2$ ,  $\beta 3$ ,  $\beta 4$ ,  $\beta 5$ ,  $\beta 6$  and  $\beta 8$ ) have been characterized and are expressed in mammalian tissues.  $\beta 1$  and  $\beta 4$  are present throughout the cytosol,  $\beta 2$  is present in the nuclei and nucleoplasm, and  $\beta 3$  is a neuron-specific cytoskeletal protein.  $\gamma$  Tubulin forms the gammasome, which is required for nucleating microtubule filaments at the centrosome. Both  $\delta$  Tubulin and  $\epsilon$  Tubulin are associated with the centrosome.  $\delta$  Tubulin is a homolog of the Chlamydomonas  $\delta$  Tubulin Uni3 and is found in association with the centrioles, whereas  $\epsilon$  Tubulin localizes to the pericentriolar material.  $\epsilon$  Tubulin exhibits a cell cycle-specific pattern of localization; first associating with only the older of the centrosomes in a newly duplicated pair, and later associating with both centrosomes.

**Specifications**

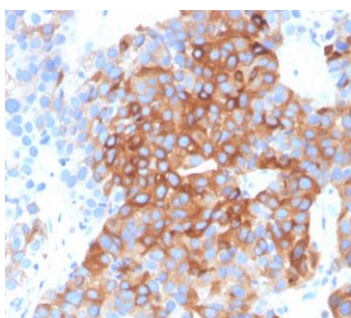
Clone: UBB3/3732  
 Source: Mouse  
 Isotype: IgG2a/k  
 Reactivity: Human  
 Immunogen: Synthetic human Tubulin beta 3 protein peptide aa 437-450, coupled to KLH  
 Localization: Cytoplasm  
 Formulation: Antibody in PBS pH 7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC  
 Package:

Description	Catalog No.	Size
Tubulin III Beta Concentrated	MC0163	1 ml
Tubulin III Beta Prediluted	MC0163RTU7	7 ml

**IHC Procedure\***

Positive Control Tissue: Brain  
 Concentrated Dilution: 50-200  
 Pretreatment: Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human bladder carcinoma stained with anti-Tubulin III Beta using DAB

**References:**

1. A single allele of Hdac2 but not Hdac1 is sufficient for normal mouse brain development in the absence of its paralog. Hagelkruys, A et al. Development 141:604-16. 2014.
2. Accelerated high-yield generation of limb-innervating motor neurons from human stem cells. Amoroso MW, et al. J Neurosci 33:574-86, 2013.
3. Regional hippocampal differences in AKT survival signaling across the lifespan: implications for CA1 vulnerability with aging. Jackson TC, et al. Cell Death Differ 16:439-48, 2009.