



## TUBB3 Mouse Monoclonal Antibody

E10-20374

**Background:** Tubulin, beta 3, also known as TUBB3. Tubulin is the major constituent of microtubules. It binds two moles of GTP, one at an exchangeable site on the beta chain and one at a non exchangeable site on the alpha-chain. Tubulin is a highly conserved protein with a molecular weight of ~50 kD. Microtubules play key roles in chromosome segregation in mitosis, intracellular transport, ciliary and flagellar bending, and structural support of the cytoskeleton. The two main tubulin isoforms,  $\alpha$ - and  $\beta$ -tubulin, are usually products of separate genes. The  $\beta$ -tubulin family includes six expressed genes that produce the polypeptide isoforms known as Classes I through VI, each of which have a distinct pattern of expression. Class III  $\beta$ -tubulin is found in neurons and mammalian testis cells and is widely used as a neuronal marker in developmental neurobiology, neoplasia, and stem cell research. Class III  $\beta$ -tubulin expression in neuronal and neuroblastic tumors is differentiation dependent, and its expression in certain non-neuronal neoplasms has been associated with poor prognosis and/or resistance to chemotherapy.

**Catalog Number:** E10-20374

**Amount:** 100 $\mu$ g/100 $\mu$ l

**Clone Number:** 2E9

**Species:** Mouse IgG1

**MW:** 50kDa

**Aliases:** Tubulin, beta 3; MC1R; TUBB4

**Entrez Gene:** 10381

**Immunogen:** Purified recombinant fragment of human TUBB3 expressed in E. Coli.

**Storage:** Store at 4 °C for long term storage, store at 20 °C for short term storage

**Formulation:** Ascitic fluid containing 0.03% sodium azide.

**Species Reactivities:** Human

**Tested Applications:** WB,IF,FC,ELISA. Not yet tested in other applications. Determining optimal working dilutions by titration test.

**Application notes:** WB. 1/500 - 1/2000.IF. 1/200 - 1/1000.FC. 1/200 - 1/400.ELISA. Propose dilution 1/10000.

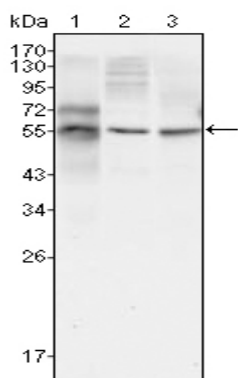


Figure 1. Western blot analysis using TUBB3 mouse mAb against HepG2 (1), A549 (2) and Hela (3) cell lysate.

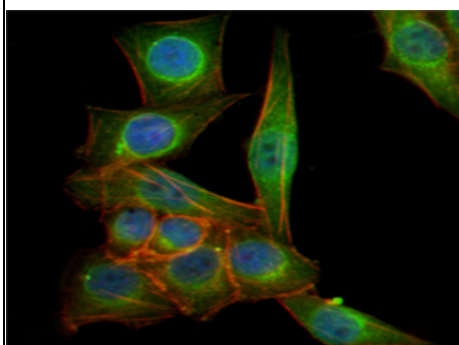


Figure 2. Immunofluorescence analysis of PANC-1 cells using TUBB3 mouse mAb (green). Blue. DRAQ5 fluorescent DNA dye. Red. Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

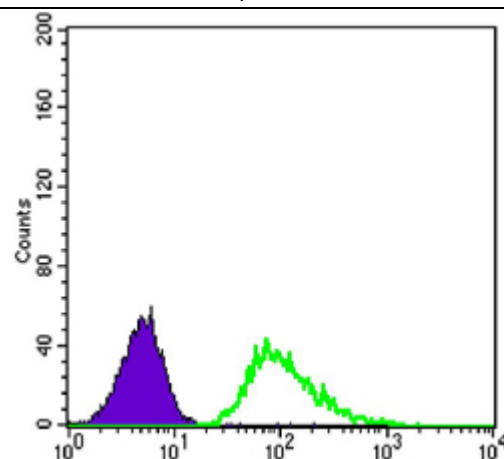


Figure 3. Flow cytometric analysis of A549 cells using TUBB3 mouse mAb (green) and negative control (purple).

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