## **Beta3-Tubulin (TUJ-1) Antibody**

ALTERNATE NAMES:	Tubulin beta-3 chain, Tubulin beta-III	
CATALOG NO:	3525-30T 3525-100	30 μg (Trial size) 100 μg
HOST:	Rabbit	
ISOTYPE:	lgG	
IMMUNOGEN:	Synthetic peptide C-terminal (BV-M13)	
PURIFICATION:	Affinity purified rabbit IgG	
FORM:	Liquid	
FORMULATION:	0.5 mg/ml of antibody in PBS, 0.01 $\%$ BSA, 0.01 $\%$ thimerosal, and 50 $\%$ glycerol, pH 7.2	
SPECIES REACTIVITY:	Human, Mouse and Rat.	
STORAGE CONDITIONS:	Store for 1 year at -20°C from date of shipment. Avoid repeated freeze/thaw cycles.	

**DESCRIPTION:** The cytoskeleton consists of three types of cytosolic fibers: microtubules, microfilaments (actin filaments), and intermediate filaments. Globular tubulin subunits comprise the microtubule building block, with  $\alpha/\beta$ -tubulin heterodimers forming the tubulin subunit common to all eukaryotic cells. y-tubulin is required to nucleate polymerization of tubulin subunits to form microtubule polymers. Many cell movements are mediated by microtubule action, including the beating of cilia and flagella, cytoplasmic transport of membrane vesicles, chromosome alignment during meiosis/mitosis, and nerve-cell axon migration. These movements result from competitive microtubule polymerization and depolymerization or through the actions of microtubule motor proteins. β3-tubulin (TUBB3) is one of six β-tubulin isoforms and is expressed highly during fetal and postnatal development (axon guidance and maturation). Its expression levels decrease in the adult central nervous system (CNS) but remain high in the peripheral nervous system (PNS). Microtubules enriched in β3-tubulin are more dynamic than those composed of other β-tubulin isoforms. Research studies have shown that mutations in the β3-tubulin gene TUBB3 cause ocular motility defects and other nervous system disorders. Furthermore, β3-tubulin is present in neoplastic but not in normal differentiated glial cells. Thus,  $\beta$ 3-tubulin is a great neuronal marker.

APPLICATION: Western blot: 1:200

Note: This information is only intended as a guide. The optimal dilutions must be determined by the user.



Western blot of Jurkat cell lysate with beta3-tubulin antibody

## RELATED PRODUCTS:

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- Beta3-Tubulin Blocking Peptide (Cat. No. 3525BP-50)
- Tubulin antibody (Cat. No. 3708-100)

FOR RESEARCH USE ONLY! Not to be used on humans.

