#2128 Store at –20°C

β-Tubulin (9F3) Rabbit mAb

☑ 100 µl
(10 western blots)

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rev. 12/16/10

Entrez-Gene ID # 203068
Swiss-Prot Acc. # P07437

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IHC-P, IF-IC, F	H, M, R, Mk, B, Z, (C)	55 kDa	Rabbit IgG**
Endogenous			

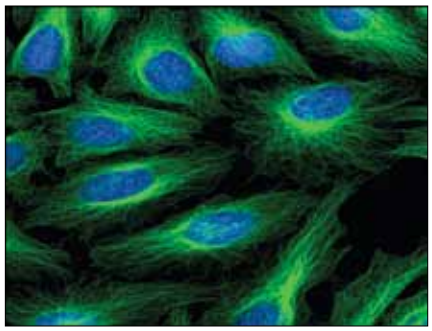
Background: The cytoskeleton consists of three types of cytosolic fibers: microfilaments (actin filaments), intermediate filaments and microtubules. Globular tubulin subunits are the building blocks of a microtubule, and the α/β-tubulin heterodimer forms the tubulin subunit, which is present in all eukaryotic cells. γ-tubulin is necessary to nucleate polymerization of tubulin subunits to form microtubules. Many cell movements, including beating of cilia and flagella, transport of membrane vesicles in the cytoplasm, alignment of chromosomes during meiosis and mitosis and migration of nerve-cell axons by extending the neuronal growth cone, are mediated by microtubules. These movements are either the result of polymerization and depolymerization or the actions of microtubule motor proteins (1).

Specificity/Sensitivity: β-Tubulin (9F3) Rabbit mAb detects endogenous levels of total β-tubulin protein.

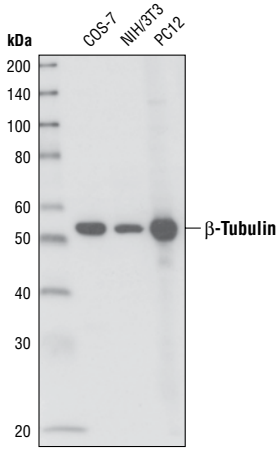
Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to the amino terminus of human β-tubulin.

Background References:

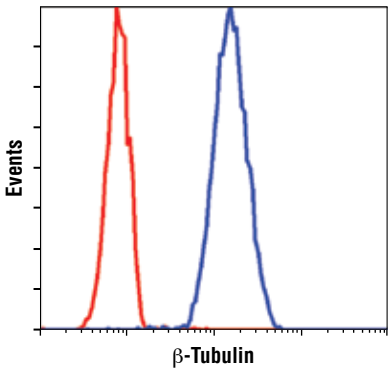
(1) Westermann, S. and Weber, K. (2003) *Nat. Rev. Mol. Cell Biol.* 4, 938 -947.



Confocal immunofluorescent analysis of HeLa cells, using β-Tubulin (9F3) Rabbit mAb (green). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).



Western blot analysis of extracts from COS-7, NIH/3T3 and PC12 cells, using β-Tubulin (9F3) Rabbit mAb.



Flow cytometric analysis of NIH/3T3 cells, using β-Tubulin (9F3) Rabbit mAb (blue) compared to a nonspecific negative control antibody (red).

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. *Do not aliquot the antibody.*

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunohistochemistry (Paraffin)	1:50
Unmasking buffer:	Citrate
Antibody diluent:	SignalStain® Antibody Diluent #8112
Detection reagent:	SignalStain® Boost (HRP, Rabbit) #8114

†*Optimal IHC dilutions determined using SignalStain® Boost IHC Detection Reagent.*

Immunofluorescence (IF-IC)	1:200
Flow Cytometry	1:100

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

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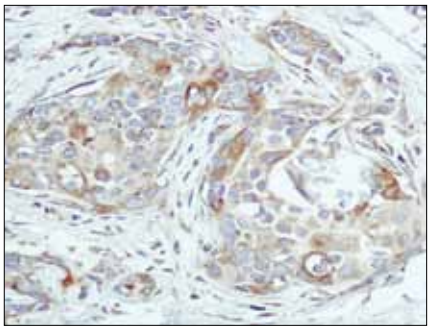
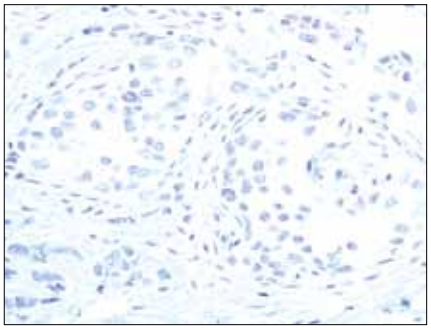
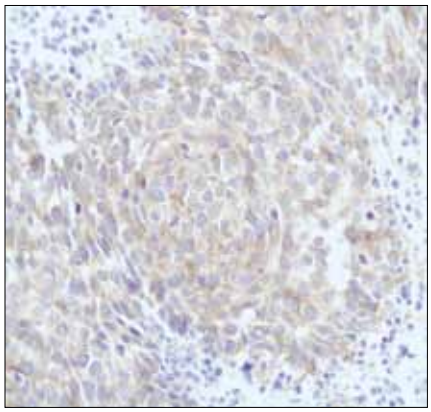
Applications Key: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide

Species Cross-Reactivity Key: **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—horse **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.

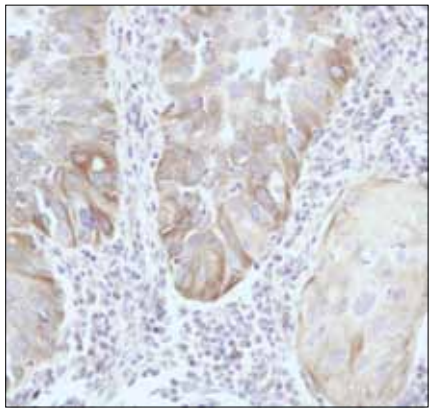




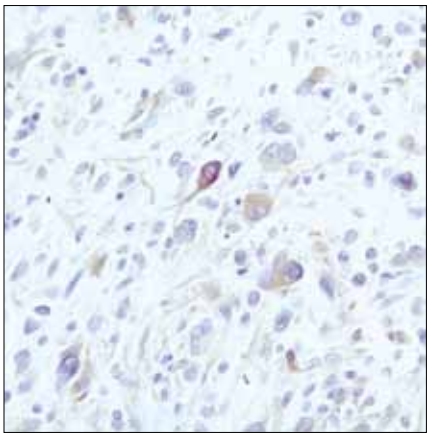
Immunohistochemical analysis of paraffin-embedded human breast carcinoma, using β-Tubulin (9F3) Rabbit mAb preincubated with control peptide (left) or β-Tubulin Blocking Peptide #1032 (right).



Immunohistochemical analysis of paraffin-embedded human melanoma, using β-Tubulin (9F3) Rabbit mAb.



Immunohistochemical analysis of paraffin-embedded human lung carcinoma, using β-Tubulin (9F3) Rabbit mAb.



Immunohistochemical analysis of paraffin-embedded human glioblastoma, using β-Tubulin (9F3) Rabbit mAb.