Store at -20°C

# β-Tubulin (9F3) Rabbit mAb

#2128

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rev. 12/17/15

**Entrez-Gene ID** #203068
**UniProt ID** #P07437

**For Research Use Only. Not For Use In Diagnostic Procedures.**

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

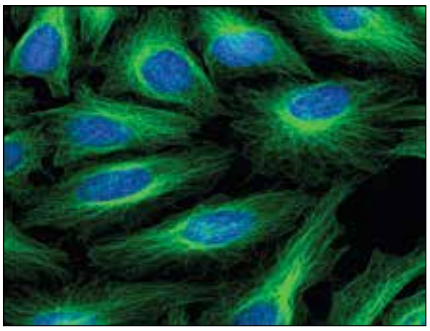
**Background:** The cytoskeleton consists of three types of cytosolic fibers: microtubules, microfilaments (actin filaments), and intermediate filaments. Globular tubulin subunits comprise the microtubule building block, with α/β-tubulin heterodimers forming the tubulin subunit common to all eukaryotic cells. γ-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 (1).

**Specificity/Sensitivity:** β-Tubulin (9F3) Rabbit mAb detects endogenous levels of total β-tubulin protein, and does not cross-react with recombinant α-tubulin.

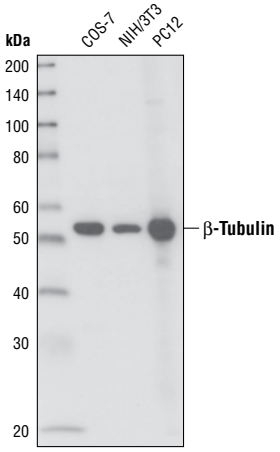
**Source/Purification:** Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to the amino terminus of human β-tubulin.

**Background References:**

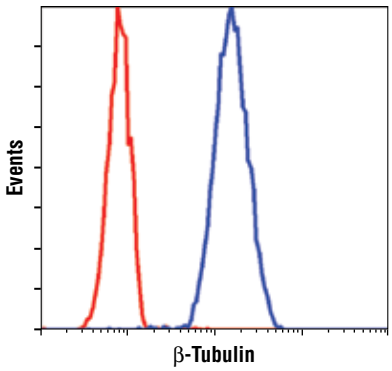
(1) Westermann, S. and Weber, K. (2003) *Nat. Rev. Mol. Cell Biol.* 4, 938 -947.



*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) | 1:100 |
| Flow Cytometry | 1:100 |

**For product specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com**



**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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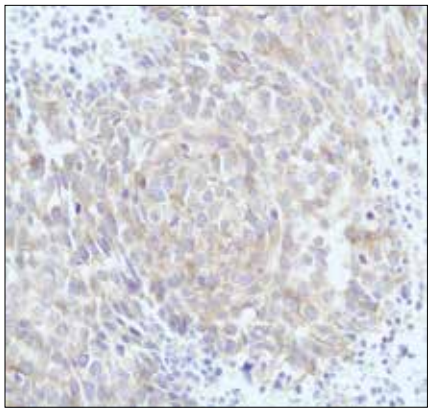
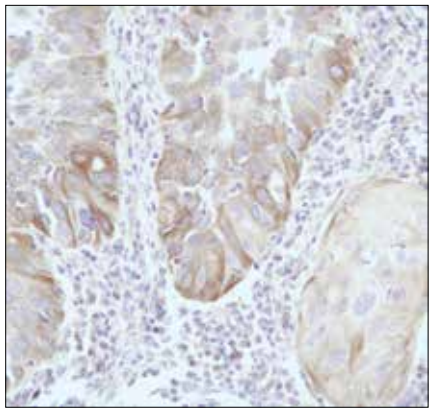
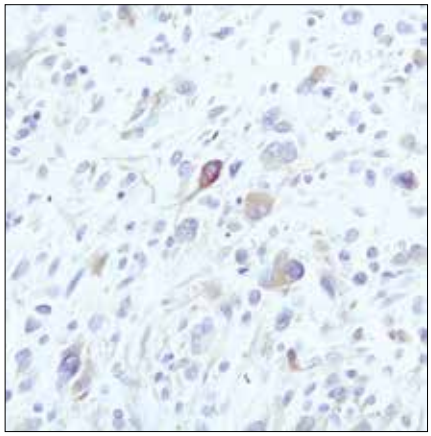
**Applications:** **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide **Species Cross-Reactivity:** **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **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.



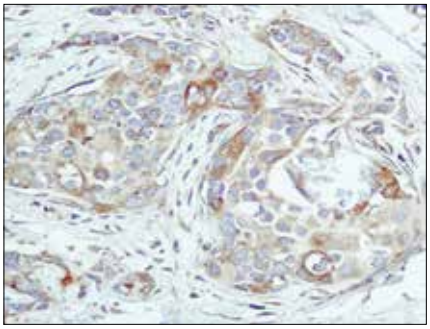
*Immunohistochemical analysis of paraffin-embedded human melanoma, using β-Tubulin (9F3) Rabbit mAb.*

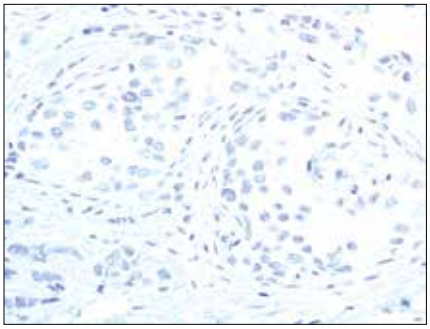


*Immunohistochemical analysis of paraffin-embedded human lung carcinoma, using β-Tubulin (9F3) Rabbit mAb.*



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





*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).*

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