

#2148 Store at -20°C

α/β-Tubulin Antibody

✓ 100 μl
(10 western blots)



Orders ■ 877-616-CELL (2355)
orders@cellsignaling.com
Support ■ 877-678-TECH (8324)
info@cellsignaling.com
Web ■ www.cellsignaling.com

rev. 12/29/11

This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

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

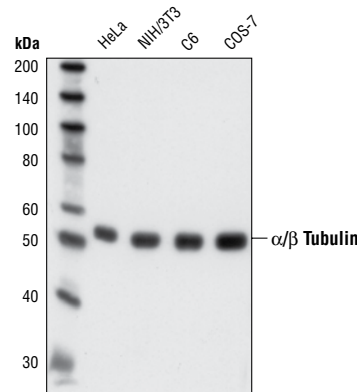
Background: The cytoskeleton consists of three types of cytosolic fibers: microtubules, microfilaments (actin filaments), and intermediate filaments. Globular tubulin subunits comprise the microtubule building block, with α/β-tubulin heterodimers forming the tubulin subunit common to all eukaryotic cells. γ-tubulin is necessary 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: The α/β-Tubulin Antibody detects endogenous levels of both α- and β-tubulin total protein, and does cross-react with both recombinant α- and β-tubulin.

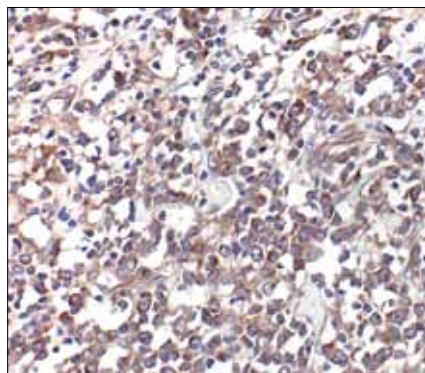
Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the sequence of human α- and β-tubulin. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

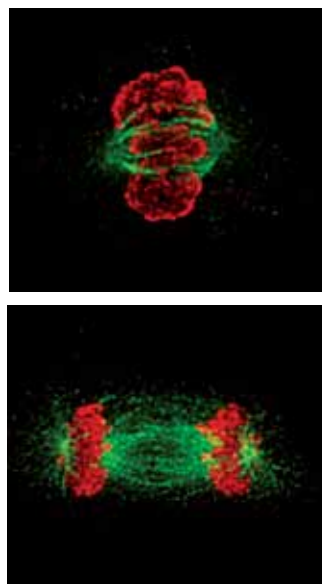
(1) Westermann, S. and Weber, K. (2003) *Nat. Rev. Mol. Cell Biol.* 4, 938–947.



Western blot analysis of extracts from HeLa, NIH/3T3, C6 and COS-7 cells, using α/β-Tubulin Antibody.



Immunohistochemical analysis of paraffin-embedded human MALToma using α/β-Tubulin Antibody.



Confocal immunofluorescent analysis of NIH-3T3 cells, using α/β-Tubulin Antibody (green) and Phospho-Histone H3 (Ser10) (6G3) Mouse mAb #9706 (red) showing different stages of the cell cycle.

Entrez-Gene ID # 10376
Swiss-Prot Acc. # P68363

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μg/ml BSA and 50% glycerol. 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.

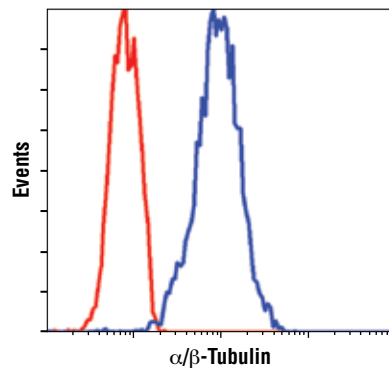
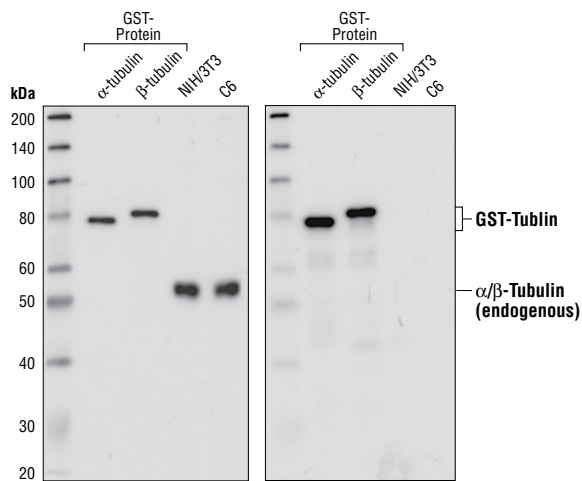
Recommended Antibody Dilutions:

Western Blotting	1:1000
Immunohistochemistry (Paraffin)	1:50†
Unmasking buffer:	Citrate
Antibody diluent:	TBST-5%NGS
Detection reagent:	SignalStain® Boost (HRP, Rabbit) #8114
† Optimal IHC dilutions determined using SignalStain® Boost IHC Detection Reagent.	
Immunofluorescence (IF-IC)	1:50
Flow Cytometry	1:50

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

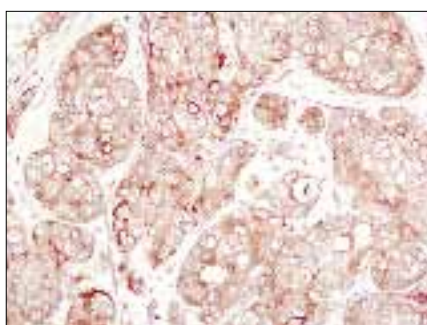
Please visit www.cellsignaling.com for a complete listing of recommended companion products.

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.

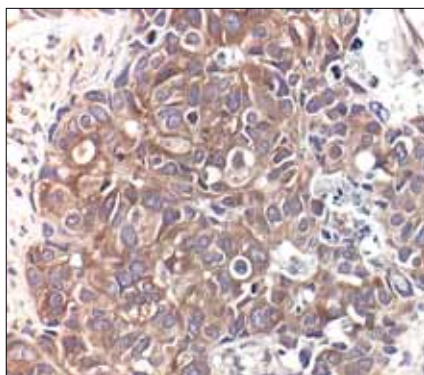
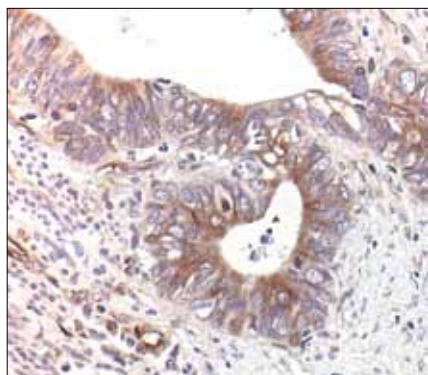


Flow cytometric analysis of C6 cells using α/β -Tubulin Antibody (blue) compared to a nonspecific negative control antibody (red).

Western blot analysis of recombinant alpha-tubulin and beta-tubulin GST-fusion proteins, and extracts from NIH/3T3 and C6 cells, using α/β -Tubulin Antibody (left) and GST Antibody #2622 (right).



Immunohistochemical analysis of paraffin-embedded human breast carcinoma using β -Tubulin (9F3) Rabbit mAb #2128 in the presence of control peptide (left) or β -Tubulin Blocking Peptide (right).



Immunohistochemical analysis of paraffin-embedded human colon carcinoma, showing cytoplasmic localization, using α/β -Tubulin Antibody.

Immunohistochemical analysis of paraffin-embedded human breast carcinoma using α/β -Tubulin Antibody.