

#2146 Store at -20°C

β-Tubulin Antibody

✓ 100 µl
(10 western blots)

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

rev. 1/15/10

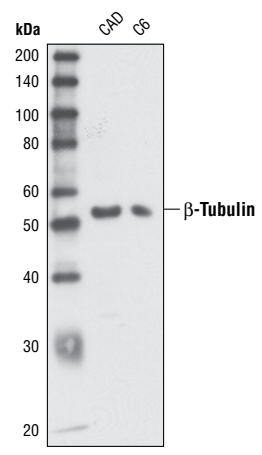
This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

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

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: The β-Tubulin Antibody detects endogenous levels of total β-tubulin protein, and does not cross-react with recombinant α-tubulin.

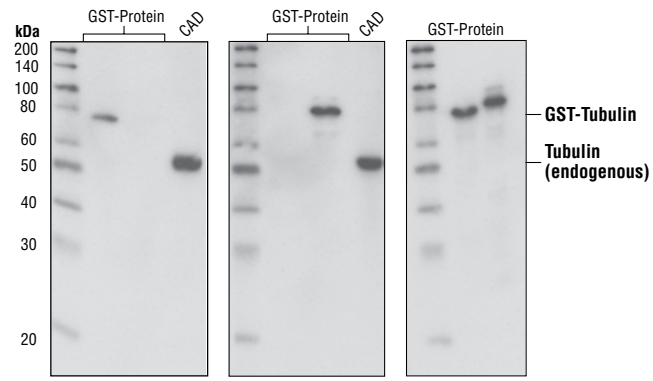
Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide (KLH-coupled) corresponding to the sequence of human β-tubulin. Antibodies are purified by protein A and peptide affinity chromatography.



Western blot analysis of extracts from CAD and C6 cells using β-Tubulin Antibody.

Background References:

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



Western blot analysis of recombinant α-tubulin and β-tubulin GST-fusion proteins and extracts from CAD cells using α-Tubulin Antibody #2144(left), β-Tubulin Antibody (middle) and GST Antibody #2622 (right).

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.

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

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.

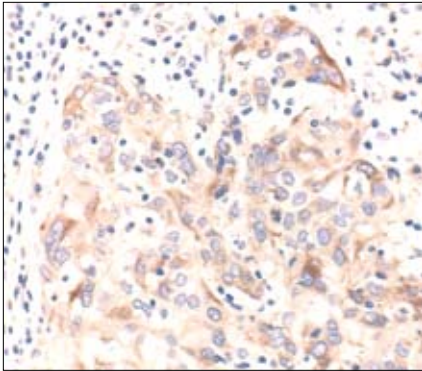
**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

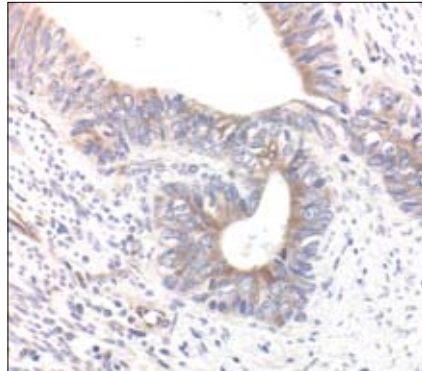
Western Blotting	1:1000
Immunohistochemistry (Paraffin)	1:100
IHC protocol: Unmasking buffer/Antibody diluent Citrate/TBST-5%NGS	
Immunofluorescence (IF-IC)	1:50
Flow Cytometry:	1:100

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

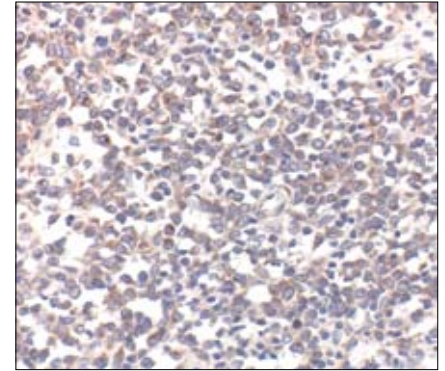
Please visit www.cellsignal.com for a complete listing of recommended companion products.



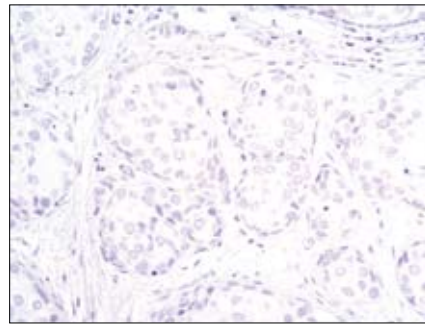
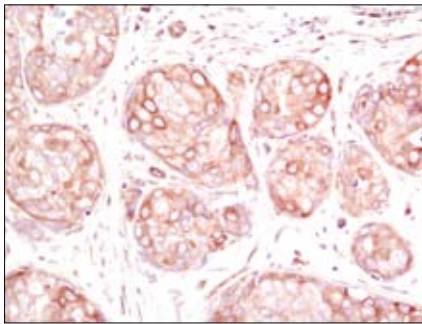
Immunohistochemical analysis of paraffin-embedded human breast carcinoma, showing cytoplasmic localization, using β -Tubulin Antibody.



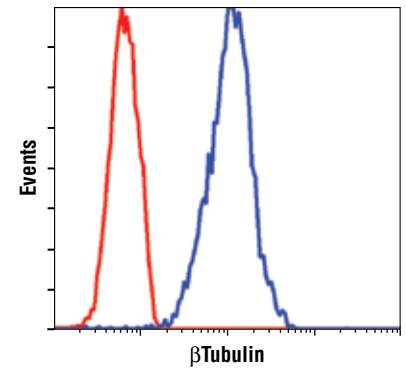
Immunohistochemical analysis of paraffin-embedded human colon carcinoma, using β -Tubulin Antibody.



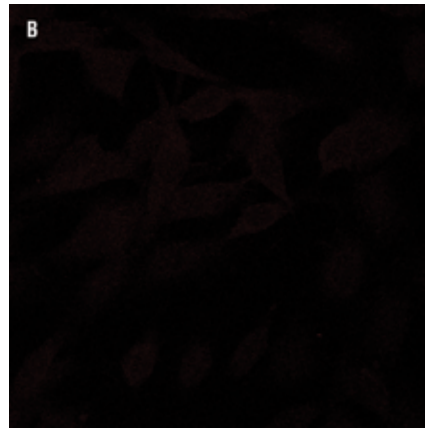
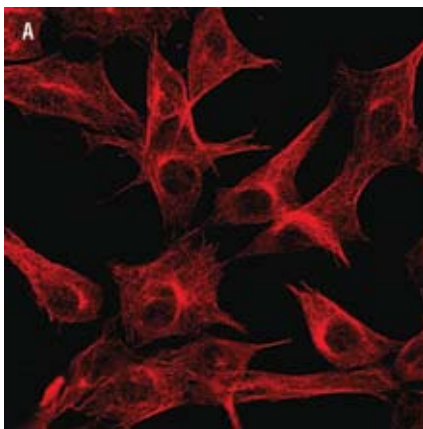
Immunohistochemical analysis of paraffin-embedded human MALToma, using β -Tubulin Antibody.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma using β -Tubulin Antibody in the presence of control peptide (left) or β -Tubulin Blocking Peptide #1032 (right).



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



Confocal microscopic images of NIH/3T3 cells showing cytoskeletal stain with β -Tubulin Antibody (A) compared to an isotype control (B).