**α-Tubulin (DM1A) Mouse mAb**

**Applications**
- **W**, IHC-P, IF-IC, F

**Species Cross-Reactivity**
- **H**, M, R, Mk

**Molecular Wt.**
- 52 kDa

**Isotype**
- Mouse IgG1

**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 \( \alpha/\beta \)-tubulin heterodimers forming the tubulin subunit common to all eukaryotic cells. \( \gamma \)-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:**

\( \alpha \)-Tubulin (DM1A) Mouse mAb detects endogenous levels of total \( \alpha \)-tubulin protein.

**Source/Purification:**

Monoclonal antibody is produced by immunizing animals with full-length chicken \( \alpha \)-tubulin purified from brain extracts, and recognizes residues surrounding Val440 of \( \alpha \)-tubulin protein.

**Background References:**


**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.

**Recommended Antibody Dilutions:**
- Western Blotting 1:1000
- Immunohistochemistry (Paraffin) 1:100†
- Flow Cytometry 1:400

**Recommended Unmasking/Washing Buffer:**
- Citrate

**Recommended Antibody Diluent:**
- SignalStain® Antibody Diluent #8112

**Recommended Detection Reagent:**
- SignalStain® Boost (HRP, Mouse) #8125

**Recommended Flow Cytometry Antibody Dilution:**
- 1:2000

**Recommended Immunofluorescence Antibody Dilution:**
- 1:200

**Recommended Webpage:**

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 nonfat dry milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

**Entrez-Gene ID** #10376

**Swiss-Prot Acc.** #P68363

**Order Information:**
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