# α-Tubulin Mouse mAb

Catalog No.: AC012 106 Publications



# **Basic Information**

#### **Observed MW**

55kDa

### **Calculated MW**

50kDa

### Category

Monoclonal Antibody

### **Applications**

WB,IHC-P,IF/ICC,ELISA

### **Cross-Reactivity**

Human, Mouse, Rat

### CloneNo number

AMC0479

## **Background**

Microtubules of the eukaryotic cytoskeleton perform essential and diverse functions and are composed of a heterodimer of alpha and beta tubulin. The genes encoding these microtubule constituents are part of the tubulin superfamily, which is composed of six distinct families. Genes from the alpha, beta and gamma tubulin families are found in all eukaryotes. The alpha and beta tubulins represent the major components of microtubules, while gamma tubulin plays a critical role in the nucleation of microtubule assembly. There are multiple alpha and beta tubulin genes and they are highly conserved among and between species. This gene encodes an alpha tubulin that is a highly conserved homolog of a rat testis-specific alpha tubulin. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

# **Recommended Dilutions**

**WB** 1:5000 - 1:20000

**IHC-P** 1:500 - 1:2000

**IF/ICC** 1:200 - 1:1000

**ELISA** Recommended starting

concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

### **Contact**

www.abclonal.com

### **Immunogen Information**

 Gene ID
 Swiss Prot

 7277
 P68366

### **Immunogen**

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

### **Synonyms**

ALS22; TUBA1; H2-ALPHA; α-Tubulin

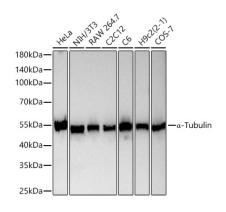
### **Product Information**

SourceIsotypePurificationMouseIgG1Affinity purification

#### Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS containing 50% glycerol and 1% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.



Western blot analysis of various lysates using  $\alpha$ -Tubulin Mouse mAb (AC012) at 1:20000 dilution incubated overnight at 4°C.

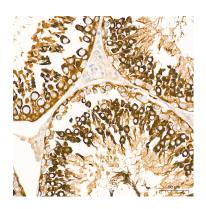
Secondary antibody: HRP-conjugated Goat anti-Mouse IgG (H+L) (AS003) at 1:10000 dilution.

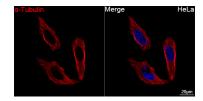
Lysates/proteins: 25 µg per lane.

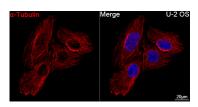
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 45s.



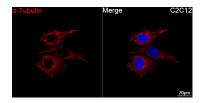


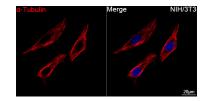


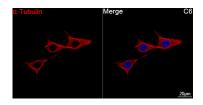
Immunohistochemistry analysis of paraffin-embedded Rat testis tissue using  $\alpha$ -Tubulin Mouse mAb (AC012) at a dilution of 1:1000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

Confocal imaging of HeLa cells using  $\alpha$ -Tubulin Mouse mAb (AC012, dilution 1:500) followed by a further incubation with Cy3-conjugated Goat anti-Mouse IgG (H+L) (AS008, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.

Confocal imaging of U-2 OS cells using  $\alpha$ -Tubulin Mouse mAb (AC012, dilution 1:500) followed by a further incubation with Cy3-conjugated Goat anti-Mouse IgG (H+L) (AS008, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.







Confocal imaging of C2C12 cells using  $\alpha$ -Tubulin Mouse mAb (AC012, dilution 1:500) followed by a further incubation with Cy3-conjugated Goat anti-Mouse IgG (H+L) (AS008, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.

Confocal imaging of NIH/3T3 cells using  $\alpha$ -Tubulin Mouse mAb (AC012, dilution 1:500) followed by a further incubation with Cy3-conjugated Goat anti-Mouse IgG (H+L) (AS008, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.

Confocal imaging of C6 cells using  $\alpha$ -Tubulin Mouse mAb (AC012, dilution 1:500) followed by a further incubation with Cy3-conjugated Goat anti-Mouse IgG (H+L) (AS008, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.