10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# Alpha-tubulin Antibody
**Catalog # ASC11733**

## Specification

### Alpha-tubulin Antibody - Product Information

| | |
|---|---|
| Application | **WB, IHC-P, IF, E** |
| Primary Accession | Q13748 |
| Other Accession | NP_005992, 17921993 |
| Reactivity | **Human, Mouse, Rat** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **IgG** |
| Calculated MW | **Predicted: 50 kDa**<br><br>**Observed: 45 kDa KDa** |
| Application Notes | **Alpha-tubulin antibody can be used for detection of alpha-tubulin by Western blot at 0.25 - 0.5 µg/ml. Antibody can also be used for Immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.** |

### Alpha-tubulin Antibody - Additional Information

| | |
|---|---|
| Gene ID | **7278** |

**Target/Specificity**
TUBA3C; Alpha-tubulin antibody is human, mouse and rat reactive.

**Reconstitution & Storage**
Alpha-tubulin antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.

**Precautions**
Alpha-tubulin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Alpha-tubulin Antibody - Protein Information

### Alpha-tubulin Antibody - Protocols

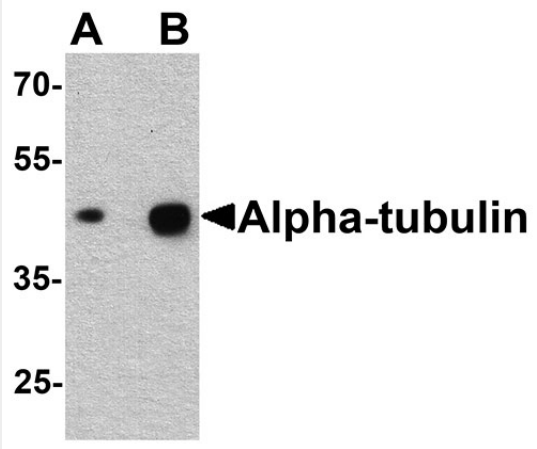
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence

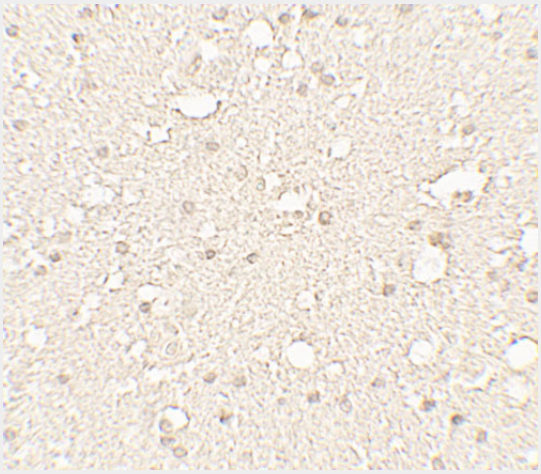
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

- Immunoprecipitation
- Flow Cytomety
- Cell Culture

**Alpha-tubulin Antibody - Images**

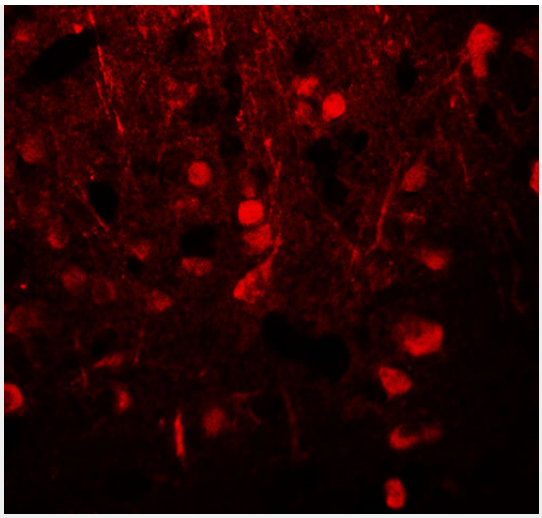



Western blot analysis of alpha-tubulin in human brain tissue lysate with alpha-tubulin antibody at (A) 0.25 and (B) 0.5 µg/ml.



Immunohistochemistry of Alpha-tubulin in human brain tissue with Alpha-tubulin antibody at 5 µg/mL.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Immunofluorescence of Alpha-tubulin in human brain tissue with Alpha-tubulin antibody at 20 µg/mL.

**Alpha-tubulin Antibody - Background**

Alpha-tubulin belongs to the tubulin superfamily, which is composed of six distinct families. Along with beta-tubulins, alpha-tubulins are the major components of microtubules. These microtubules are involved in a wide variety of cellular activities ranging from mitosis and transport events to cell movement and the maintenance of cell shape. Alpha- and beta-tubulin dimers are assembled to 13 protofilaments that form a microtubule of 22-nm diameter (reviewed in 1). Tyrosine ligase adds a C-terminal tyrosine to monomeric alpha-tubulin. Assembled microtubules can again be detyrosinated by a cytoskeleton-associated carboxypeptidase (2). Another post-translational modification of detyrosinated alpha-tubulin is C-terminal polyglutamylation, which is characteristic of microtubules in neuronal cells and the mitotic spindle (3). Like GAPDH and ?-Actin, this antibody makes an excellent loading control in immunoblots.

**Alpha-tubulin Antibody - References**

McKean PG, Vaughan S, and Gull K. The extended tubulin family. J. Cell Sci. 2001; 114:2723-33.
Barra HA, Arce CA, and Argarana CE. Posttranslational tyrosination/detyrosination of tubulin. Mol. Neurobiol. 1988; 2:133-53.
Fukshima N, Furuta D, Hidaka Y, et al. Post-translational modifcations of tubulin in the nervous system. J. Neurochem. 2009; 109:683-693.