

**Anti-ALPHA-TUBULIN (RABBIT) Antibody Biotin Conjugated**  
**Alpha-Tubulin Antibody Biotin Conjugated**  
**Catalog # ASR5869**

**Specification**

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**Anti-ALPHA-TUBULIN (RABBIT) Antibody Biotin Conjugated - Product Information**

Host	Rabbit
Conjugate	Biotin
Target Species	Human
Reactivity	Rat, Human, Mouse, Chicken, Goat, Bovine, Sheep
Clonality	Polyclonal
Application	WB, IHC, E, I, LCI
Application Note	Anti-Tubulin Loading Control Antibody has been tested for use in ELISA and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band at ~50 kDa in size corresponding to alpha tubulin by western blotting in the appropriate cell lysate or extract.
Physical State	Lyophilized
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	Anti-Tubulin Loading Control Antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to the C-Terminal region near amino acids 425-451 of Human alpha Tubulin.
Reconstitution Volume	100 µL
Reconstitution Buffer	Restore with deionized water (or equivalent)
Stabilizer	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Preservative	0.01% (w/v) Sodium Azide

**Anti-ALPHA-TUBULIN (RABBIT) Antibody Biotin Conjugated - Additional Information**

**Gene ID** 10376

**Purity**

Anti-Tubulin Loading Control Antibody is directed against human alpha Tubulin protein. The Loading Control Antibody was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest that this antibody would react with alpha Tubulin from a wide range of organisms, including avian, mammalian aquatic, parasitic and alga sources based on 100% homology for the immunogen sequence. Cross reactivity will occur with all isoforms of alpha tubulin. Such broad reactivity makes this antibody useful as an excellent loading control.

### Storage Condition

Store Anti-Tubulin Loading Control Antibody at 4° C prior to restoration. For extended storage aliquot Control Antibody and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge Tubulin Antibody if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

### Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

## Anti-ALPHA-TUBULIN (RABBIT) Antibody Biotin Conjugated - Protein Information

**Name** TUBA1B

### Function

Tubulin is the major constituent of microtubules, a cylinder consisting of laterally associated linear protofilaments composed of alpha- and beta-tubulin heterodimers (PubMed:<a href="http://www.uniprot.org/citations/34996871" target="\_blank">34996871</a>). Microtubules grow by the addition of GTP-tubulin dimers to the microtubule end, where a stabilizing cap forms (PubMed:<a href="http://www.uniprot.org/citations/34996871" target="\_blank">34996871</a>). Below the cap, tubulin dimers are in GDP-bound state, owing to GTPase activity of alpha- tubulin (PubMed:<a href="http://www.uniprot.org/citations/34996871" target="\_blank">34996871</a>).

### Cellular Location

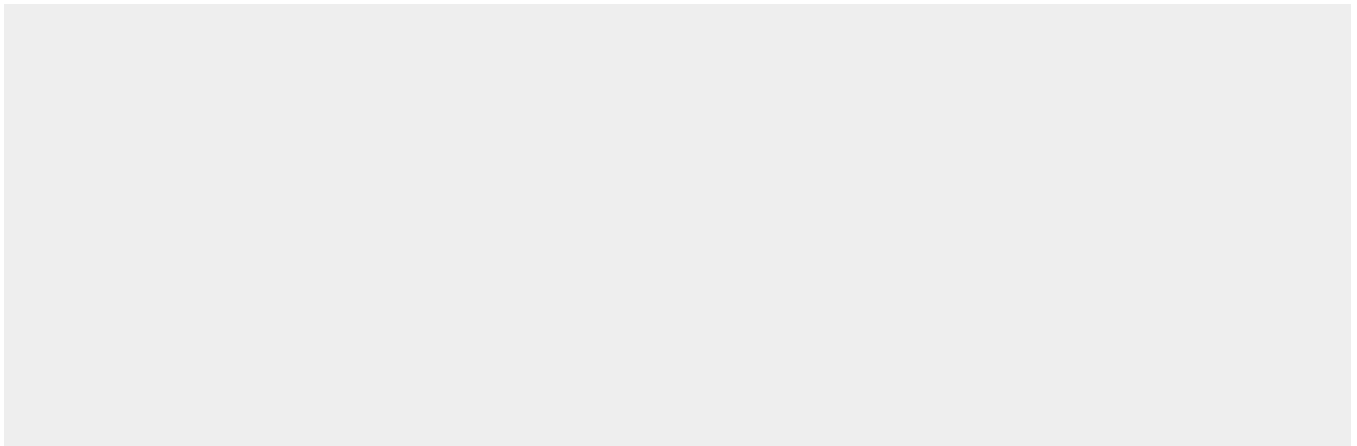
Cytoplasm, cytoskeleton

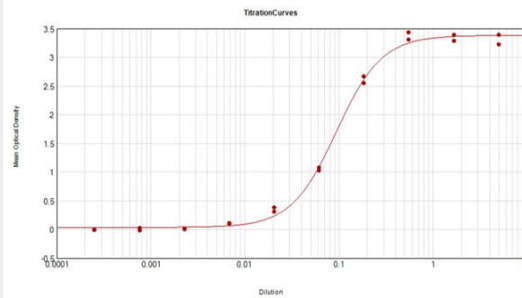
## Anti-ALPHA-TUBULIN (RABBIT) Antibody Biotin Conjugated - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-ALPHA-TUBULIN (RABBIT) Antibody Biotin Conjugated - Images





ELISA Results of Purified Rabbit Anti-Alpha Tubulin Antibody Biotin Conjugated tested against purified Alpha Tubulin Biotin Conjugated. Each well was coated in duplicate with 0.1  $\mu\text{g}$  of BSA conjugated Alpha Tubulin. The working dilution is 1:11,000. The starting dilution of antibody was 5  $\mu\text{g}/\text{ml}$  and the X-axis represents the Log10 of a 3-fold dilution. This titration is a 4-parameter curve fit where the IC50 is defined as the titer of the antibody. Assay performed using HRP Conjugation Stabilizer (p/n MB-076), Goat Anti-Rabbit IgG HRP conjugated (p/n 611-103-122), and TMB substrate (p/n TMBE-1000).

#### **Anti-ALPHA-TUBULIN (RABBIT) Antibody Biotin Conjugated - Background**

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. Tubulin itself is a globular protein consisting of two polypeptides (alpha and beta tubulin). Alpha and beta tubulin dimers are assembled to 13 protofilaments that form a microtubule of 22-nm diameter. Tyrosine ligase adds a C-terminal tyrosine to monomeric alpha tubulin. Assembled microtubules can again be detyrosinated by a cytoskeleton-associated carboxypeptidase. Detyrosinated alpha tubulin is referred to as Glu-tubulin. Another post-translational modification of detyrosinated alpha tubulin is C-terminal polyglutamylation, which is characteristic of microtubules in neuronal cells and the mitotic spindle. This antibody makes an excellent loading control.