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Anti-ALPHA-TUBULIN (RABBIT) Antibody

Alpha-Tubulin Antibody
Catalog # ASR5314

Specification

Anti-ALPHA-TUBULIN (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Rat, Human, Mouse**
Clonality	**Polyclonal**
Application	**WB, IHC, E, I, LCI**
Application Note	**Anti-Tubulin Antibody has been tested for use in ELISA, immunofluorescence, 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 most cell lysates or extracts.**
Physical State	**Liquid (sterile filtered)**
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.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-ALPHA-TUBULIN (RABBIT) Antibody - 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 -20° C prior to opening. Aliquot Loading Control Antibody contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge Tubulin Loading Control Antibody if not completely clear after standing at room temperature. This Control Antibody 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 - Protein Information

Name TUBA1B

Function
Tubulin is the major constituent of microtubules, protein filaments consisting of alpha- and beta-tubulin heterodimers (PubMed:38305685, PubMed:34996871, PubMed:38609661). Microtubules grow by the addition of GTP-tubulin dimers to the microtubule end, where a stabilizing cap forms (PubMed:38305685, PubMed:34996871, PubMed:38609661). Below the cap, tubulin dimers are in GDP-bound state, owing to GTPase activity of alpha-tubulin (PubMed:34996871, PubMed:38609661).

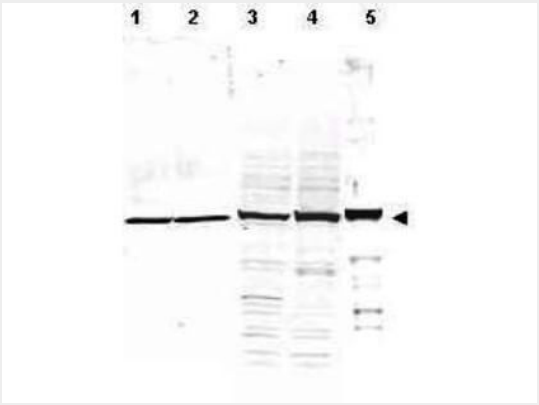
Cellular Location
Cytoplasm, cytoskeleton

Anti-ALPHA-TUBULIN (RABBIT) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-ALPHA-TUBULIN (RABBIT) Antibody - Images



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Western Blot of Rabbit Anti-Alpha Tubulin Antibody. Lane 1: whole cell lysates from mouse brain (p/n W10-000-T004). Lane 2: rat brain (p/n W12-000-T077). Lane 3: A431 cells (p/n W09-000-361). Lane 4: Jurkat cells (p/n W09-001-370). Lane 5: HeLa cells (p/n W09-000-364). Load: 35 µg per lane. Primary antibody: Alpha Tubulin antibody at 1:1,200 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO (p/n B501-0500) overnight at 4°C. Predicted/Observed size: ~50 kDa corresponding to alpha tubulin (arrowhead). Other band(s): none.

Anti-ALPHA-TUBULIN (RABBIT) Antibody - Background

Tubulin Loading Control Antibody recognizes microtubules which 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. Anti-Alpha-tubulin antibody is ideal for investigators involved in cell cycle protein research.