

Anti-ALPHA-TUBULIN (RABBIT) Antibody Peroxidase Conjugated

Alpha-Tubulin Antibody Peroxidase Conjugated Catalog # ASR5820

Specification

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

Host Conjugate Target Species Reactivity Clonality Application Application Note	Rabbit Peroxidase (Horseradish) Human Rat, Human, Mouse, Chicken, Goat, Bovine, Sheep Polyclonal WB, IHC, E, I, LCI 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
Physical State Buffer	extract. Lyophilized 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 Reconstitution Buffer	100 μL Restore with deionized water (or equivalent)
Stabilizer	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Preservative	0.01% (w/v) Gentamicin Sulfate. Do NOT add Sodium Azide!

Anti-ALPHA-TUBULIN (RABBIT) Antibody Peroxidase Conjugated - Additional Information

Gene ID 10376

Purity

Anti-Tubulin is directed against human alpha Tubulin protein. The Tubulin 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 antibody and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge Loading Control 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 Peroxidase Conjugated - 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:38305685, PubMed:38609661). Below the cap, tubulin dimers are in GDP-bound state, owing to GTPase activity of alpha-tubulin (PubMed:34996871, PubMed:<a href="http://www

Cellular Location Cytoplasm, cytoskeleton

Anti-ALPHA-TUBULIN (RABBIT) Antibody Peroxidase Conjugated - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-ALPHA-TUBULIN (RABBIT) Antibody Peroxidase Conjugated - Images

Anti-ALPHA-TUBULIN (RABBIT) Antibody Peroxidase 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.