## abcam

### Product datasheet

## Anti-alpha Tubulin antibody [EPR13799] ab184970

Recombinant RabMAb

#### 15 References 2 Images

#### Overview

**Product name** Anti-alpha Tubulin antibody [EPR13799]

**Description** Rabbit monoclonal [EPR13799] to alpha Tubulin

**Host species** Rabbit

Suitable for: WB **Tested applications** 

Species reactivity Reacts with: Saccharomyces cerevisiae

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control Saccharomyces cerevisiae extract.

This product is a recombinant monoclonal antibody, which offers several advantages including: **General notes** 

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity - Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

#### **Properties**

**Form** Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

**Purity** Protein A purified

Clonality Monoclonal Clone number EPR13799

Isotype ΙgG

#### **Applications**

#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab184970 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/10000 - 1/50000. Detects a band of approximately 52 kDa (predicted molecular weight: 50 kDa).

#### **Target**

#### **Function**

### Sequence similarities

# Post-translational modifications

Tubulin is the major constituent of microtubules. It binds two moles of GTP, one at an exchangeable site on the beta chain and one at a non-exchangeable site on the alpha chain.

Belongs to the tubulin family.

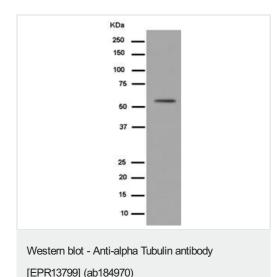
Some glutamate residues at the C-terminus are polyglutamylated. This modification occurs exclusively on glutamate residues and results in polyglutamate chains on the gamma-carboxyl group. Also monoglycylated but not polyglycylated due to the absence of functional TTLL10 in human. Monoglycylation is mainly limited to tubulin incorporated into axonemes (cilia and flagella) whereas glutamylation is prevalent in neuronal cells, centrioles, axonemes, and the mitotic spindle. Both modifications can coexist on the same protein on adjacent residues, and lowering glycylation levels increases polyglutamylation, and reciprocally. The precise function of such modifications is still unclear but they regulate the assembly and dynamics of axonemal microtubules.

Acetylation of alpha chains at Lys-40 stabilizes microtubules and affects affinity and processivity of microtubule motors. This modification has a role in multiple cellular functions, ranging from cell motility, cell cycle progression or cell differentiation to intracellular trafficking and signaling.

#### **Cellular localization**

Cytoplasm > cytoskeleton.

#### **Images**

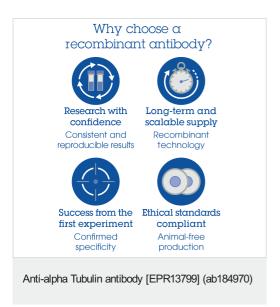


Anti-alpha Tubulin antibody [EPR13799] (ab184970) at 1/50000 dilution + Saccharomyces cerevisiae extract at 10 µg

#### Secondary

goat anti-rabbit lgG, (H+L), peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 50 kDa **Observed band size:** 52 kDa



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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