# abcam

# Product datasheet

# Anti-Tubulin antibody - Loading Control ab59680

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#### Overview

Product name Anti-Tubulin antibody - Loading Control

**Description** Rabbit polyclonal to Tubulin - Loading Control

Host species Rabbit

**Specificity** ab59680 recognises alpha/beta-tubulin.

Tested applications Suitable for: WB

Species reactivity Reacts with: Human

**Immunogen** Synthetic peptide corresponding to a sequence of human Tubulin.

Positive control HeLa cell lysate.

General notes This product is manufactured by BioVision, an Abcam company and was previously called 3708

Tubulin Antibody.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

## **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

**Storage buffer** Preservative: 0.01% Thimerosal (merthiolate)

Constituents: PBS, 30% Glycerol (glycerin, glycerine), 0.5% BSA

**Purification notes** ab59680 is affinity purified.

**Clonality** Polyclonal

**Isotype** IgG

#### **Applications**

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### The Abpromise guarantee

Our Abpromise guarantee covers the use of ab59680 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          | <b>★★★★☆ (1)</b> | Use a concentration of 0.5 - 4 µg/ml. Detects a band of approximately 55 kDa (predicted molecular weight: 55 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.

Undergoes a tyrosination/detyrosination cycle, the cyclic removal and re-addition of a C-terminal tyrosine residue by the enzymes tubulin tyrosine carboxypeptidase (TTCP) and tubulin tyrosine ligase (TTL), respectively.

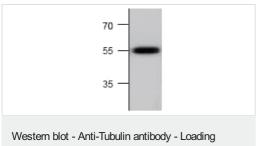
Some glutamate residues at the C-terminus are polyglutamylated. This modification occurs exclusively on glutamate residues and results in polyglutamate chains on the gamma-carboxyl group. Also monoglycylated but not polyglycylated due to the absence of functional TTLL10 in human. Monoglycylation is mainly 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-tubulins 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**



Western blot - Anti-Tubulin antibody - Loading Control (ab59680) Anti-Tubulin antibody - Loading Control (ab59680) at 4  $\mu$ g/ml + HeLa cell lysate

Predicted band size: 55 kDa
Observed band size: 55 kDa

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- Replacement or refund for products not performing as stated on the datasheet
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- · Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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