

## Product datasheet

# HRP Anti-beta Tubulin antibody [EPR1330] - Loading Control ab185057

Recombinant RabMAb

[3 References](#) [2 Images](#)

### Overview

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<b>Product name</b>	HRP Anti-beta Tubulin antibody [EPR1330] - Loading Control
<b>Description</b>	HRP Rabbit monoclonal [EPR1330] to beta Tubulin - Loading Control
<b>Host species</b>	Rabbit
<b>Conjugation</b>	HRP
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	This antibody gave a positive signal against in both Human brain tissue and Human tonsil tissue as well as the following whole cell lysates: MCF-7, Jurkat, Ramos, HeLa; NIH3T3; PC12.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. Store in the Dark.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.1% Proclin 300 Solution Constituents: 30% Glycerol (glycerin, glycerine), PBS, 1% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

**Clone number**                      EPR1330  
**Isotype**                                IgG

## Applications

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**The Abpromise guarantee**        Our **Abpromise guarantee** covers the use of ab185057 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		1/5000. Predicted molecular weight: 49 kDa.

## Target

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**Function**                                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.

**Tissue specificity**                    Ubiquitously expressed with highest levels in spleen, thymus and immature brain.

**Involvement in disease**              Cortical dysplasia, complex, with other brain malformations 6  
Skin creases, congenital symmetric circumferential, 1

**Sequence similarities**                Belongs to the tubulin family.

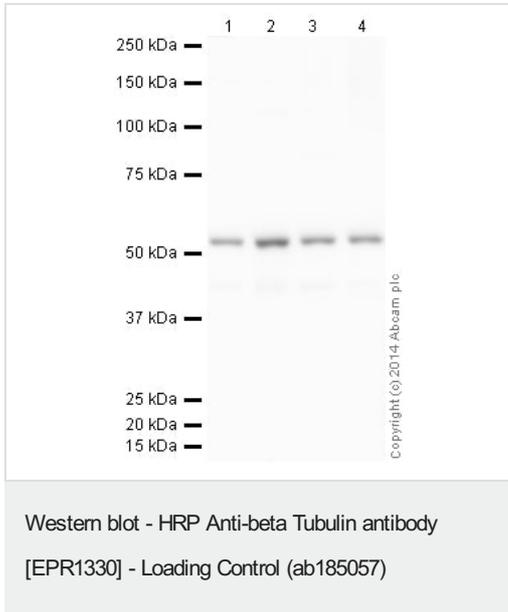
**Domain**                                    The highly acidic C-terminal region may bind cations such as calcium.

**Post-translational modifications**    Some glutamate residues at the C-terminus are polyglutamylated, resulting in polyglutamate chains on the gamma-carboxyl group (PubMed:26875866). Polyglutamylation plays a key role in microtubule severing by spastin (SPAST). SPAST preferentially recognizes and acts on microtubules decorated with short polyglutamate tails: severing activity by SPAST increases as the number of glutamates per tubulin rises from one to eight, but decreases beyond this glutamylation threshold (PubMed:26875866).  
Some glutamate residues at the C-terminus are monoglycylated but not polyglycylated due to the absence of functional TLL10 in human. Monoglycylation is mainly limited to tubulin incorporated into axonemes (cilia and flagella). Both polyglutamylation and monoglycylation can coexist on the same protein on adjacent residues, and lowering glycylation levels increases polyglutamylation, and reciprocally. The precise function of monoglycylation is still unclear.  
Phosphorylated on Ser-172 by CDK1 during the cell cycle, from metaphase to telophase, but not in interphase. This phosphorylation inhibits tubulin incorporation into microtubules.

**Cellular localization**                Cytoplasm, cytoskeleton.

## Images

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**All lanes :** HRP Anti-beta Tubulin antibody [EPR1330] - Loading Control (ab185057) at 1/5000 dilution (Milk blocking 3%)

**Lane 1 :** HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

**Lane 2 :** Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

**Lane 3 :** NIH 3T3 (Mouse embryonic fibroblast cell line) Whole Cell Lysate

**Lane 4 :** PC12 (Rat adrenal pheochromocytoma cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 49 kDa

**Observed band size:** 52 kDa

**Exposure time:** 2 seconds

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% milk before being incubated with ab185057 overnight at 4°C. Antibody binding was visualised using ECL development solution [ab133406](#)

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

HRP Anti-beta Tubulin antibody [EPR1330] -  
Loading Control (ab185057)

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

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- Extensive multi-media technical resources to help you
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