


## Product datasheet

### Anti-TUBA4A antibody [EPR13477(B)] ab177479

Recombinant **RabMAb**

[1 References](#) [7 Images](#)

#### Overview

<b>Product name</b>	Anti-TUBA4A antibody [EPR13477(B)]
<b>Description</b>	Rabbit monoclonal [EPR13477(B)] to TUBA4A
<b>Host species</b>	Rabbit
<b>Specificity</b>	Tubulin proteins have very high homology. The immunogen for this product is based on the TUBA4A protein. There is a chance that this product will detect other tubulin family members. The cross reactivity has not been experimentally determined.
<b>Tested applications</b>	<b>Suitable for:</b> IP, IHC-P, WB, ICC/IF, Flow Cyt (Intra)
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
<b>Immunogen</b>	Synthetic peptide within Human TUBA4A aa 50-150 (Cysteine residue). The exact sequence is proprietary. Database link: <a href="#">P68366</a>
<b>Positive control</b>	Molt-4, A431, Jurkat, HeLa and K562 cell lysates; Human testis and Human uterus tissues; A431 cells; K562 cells.
<b>General notes</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <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> For more information <a href="#">see here</a> . 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> .

#### Properties

<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 long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide

	Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
<b>Purity</b>	Tissue culture supernatant
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR13477(B)
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab177479 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
<b>IP</b>		1/10 - 1/100.
<b>IHC-P</b>		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
<b>WB</b>		1/1000 - 1/5000. Predicted molecular weight: 50 kDa.
<b>ICC/IF</b>		1/100 - 1/250.
<b>Flow Cyt (Intra)</b>		1/10 - 1/100. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

## Target

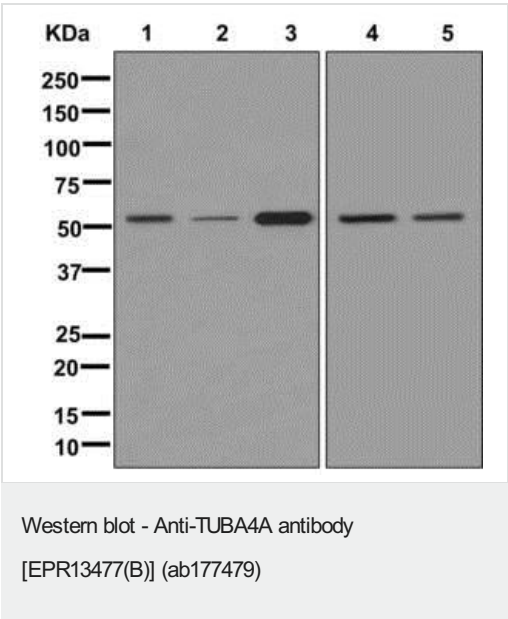
**Function** Tubulin is the major constituent of microtubules. It binds two moles of GTP, one at an exchangeable site on the beta chain and one at a non-exchangeable site on the alpha-chain.

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

**Post-translational modifications** 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 TTL10 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 polyglutamylated, 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.

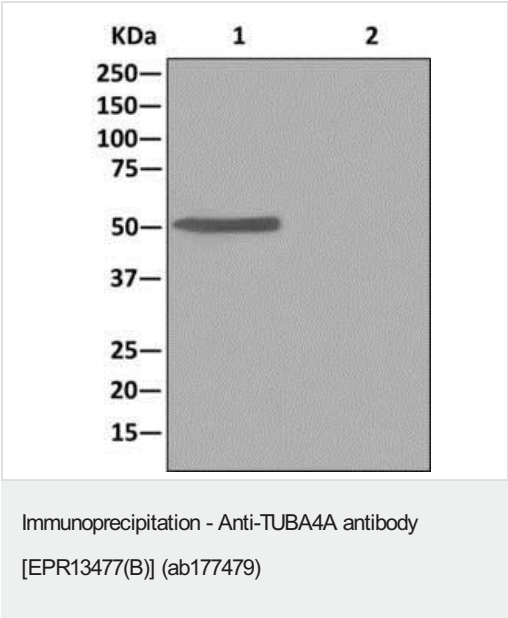


**All lanes :** Anti-TUBA4A antibody [EPR13477(B)] (ab177479) at 1/1000 dilution

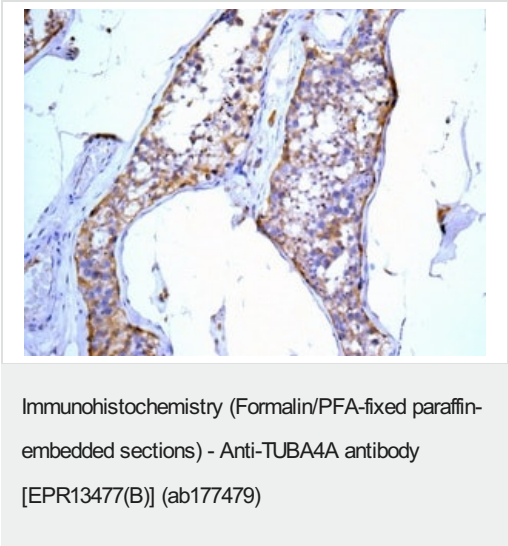
- Lane 1 :** Molt-4 cell lysate
- Lane 2 :** A431 cell lysate
- Lane 3 :** Jurkat cell lysate
- Lane 4 :** HeLa cell lysate
- Lane 5 :** K562 cell lysate

Lysates/proteins at 10 µg per lane.

**Predicted band size:** 50 kDa

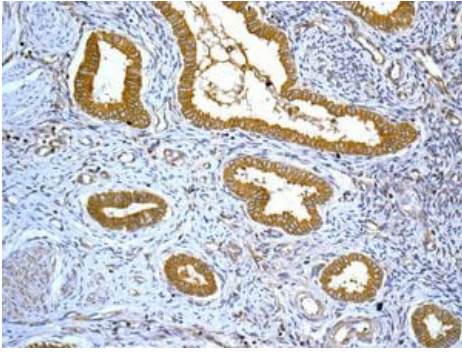


Western blot analysis on immunoprecipitation pellet from (1) Jurkat cell lysate or (2) 1X PBS (negative control) using ab177479, and HRP-conjugated anti-rabbit IgG preferentially detecting the non-reduced form of rabbit IgG.



Immunohistochemical analysis of paraffin-embedded Human testis tissue labeling TUBA4A with ab177479 at 1/100 dilution.

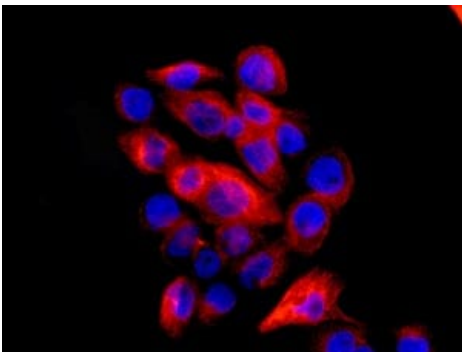
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TUBA4A antibody [EPR13477(B)] (ab177479)

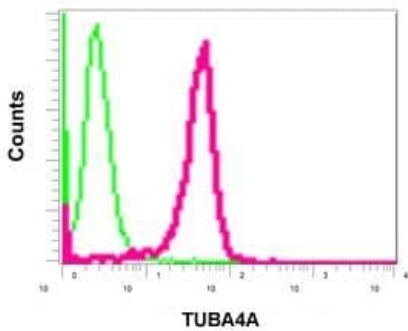
Immunohistochemical analysis of paraffin-embedded Human uterus tissue labeling TUBA4A with ab177479 at 1/100 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-TUBA4A antibody [EPR13477(B)] (ab177479)

Immunofluorescent analysis of A431 cells labeling TUBA4A with ab177479 at 1/100 dilution (red). DAPI nuclear staining (blue).



Flow Cytometry (Intracellular) - Anti-TUBA4A antibody [EPR13477(B)] (ab177479)

Intracellular flow cytometric analysis of permeabilized K562 cells labeling TUBA4A with ab177479 at 1/10 dilution (red) compared to a rabbit IgG negative control (green).

### 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

Anti-TUBA4A antibody [EPR13477(B)] (ab177479)

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

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