




Product datasheet

Anti-beta IV Tubulin antibody ab222822

★☆☆☆☆ **1 Abreviews** [4 Images](#)

Overview

Product name	Anti-beta IV Tubulin antibody
Description	Rabbit polyclonal to beta IV Tubulin
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, IP, WB, IHC-P
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Cow, Cynomolgus monkey 
Immunogen	Recombinant full length protein corresponding to Human beta IV Tubulin aa 1 to the C-terminus. Database link: P04350  Run BLAST with  Run BLAST with
Positive control	WB: 293T and HeLa whole cell lysates. IP: HeLa cell whole lysate. ICC/IF: MCF7 cells. IHC-P: Human ovarian cancer tissue.
General notes	<p>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.</p> <p>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</p>

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: 7.40 Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol (glycerin, glycerine), PBS
Purity	Protein G purified
Purification notes	Purity >95%.
Clonality	Polyclonal

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab222822 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
ICC/IF		1/50 - 1/200.
IP		1/200 - 1/2000.
WB		1/500 - 1/5000. Detects a band of approximately 50, 58 kDa (predicted molecular weight: 50 kDa).
IHC-P	★☆☆☆☆ (1)	1/20 - 1/200.

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.

Domain

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

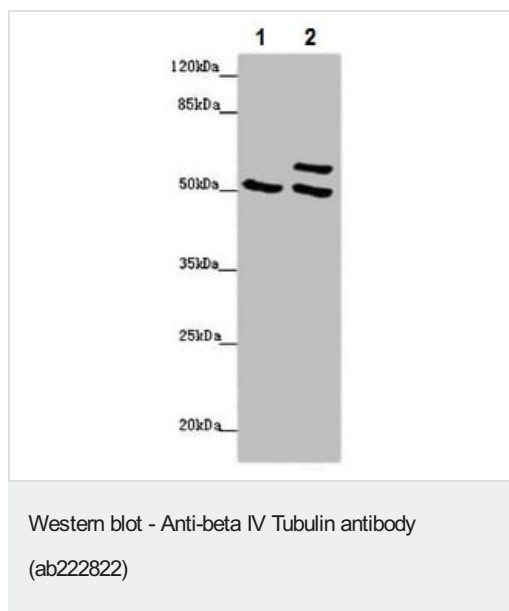
Post-translational modifications

Some glutamate residues at the C-terminus are polyglutamylated. 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 polyglutamylation, and reciprocally. The precise function of such modifications is still unclear but they regulate the assembly and dynamics of axonemal microtubules.

Cellular localization

Cytoplasm > cytoskeleton.

Images



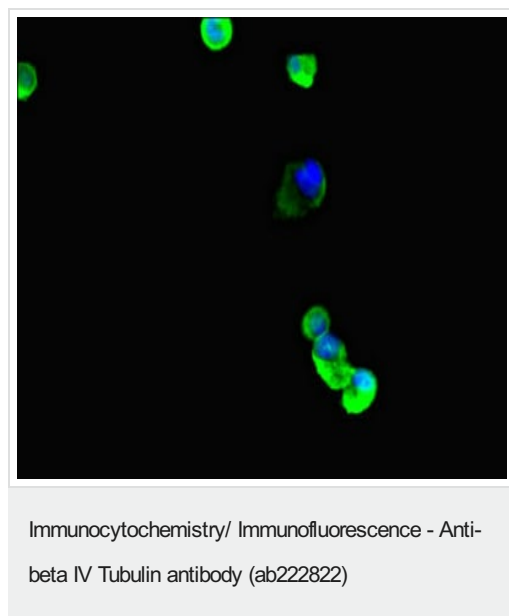
All lanes : Anti-beta IV Tubulin antibody (ab222822) at 1/500 dilution

Lane 1 : 293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

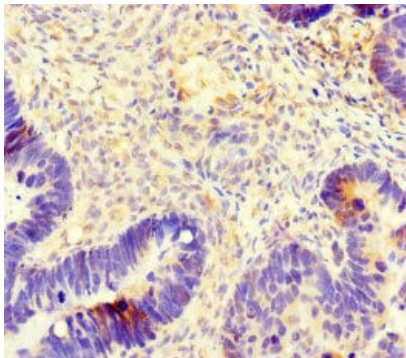
Lane 2 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Predicted band size: 50 kDa

Observed band size: 50,58 kDa

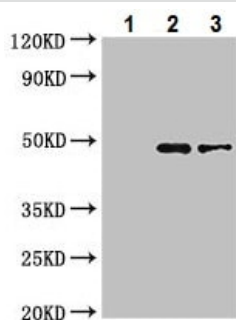


MCF7 (human breast adenocarcinoma cell line) cells stained for beta IV Tubulin (green) using ab222822 1/100 dilution in ICC/IF, followed by Alexa Fluor 488-conjugated Goat Anti-Rabbit IgG (H+L).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta IV Tubulin antibody (ab222822)

Paraffin-embedded human ovarian cancer tissue stained for beta IV Tubulin using ab222822 at 1/100 dilution in immunohistochemical analysis.



Immunoprecipitation - Anti-beta IV Tubulin antibody (ab222822)

beta IV Tubulin was immunoprecipitated from 0.5 mg of HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate with ab222822 at 1/200 dilution. Western blot was performed from the immunoprecipitate using ab222822 at 1/500 dilution.

Lane 1: Rabbit monoclonal IgG (1 µg) instead of ab222822 in HeLa whole cell lysate.

Lane 2: ab222822 IP in HeLa whole cell lysate.

Lane 3: HeLa whole cell lysate (10 µg).

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

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