abcam

ab314069

Anti-beta-Tubulin antibody [BLR236K] - BSA free

Recombinant

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.8 - 8.6 Preservative: 0.09% Sodium azide Constituents: 98% Borate buffered saline
Form	Liquid
Clonality	Monoclonal
Immunogen	Synthetic Peptide within Human TUBB aa 1-50. The exact immunogen used to generate this antibody is proprietary information. Database link P07437
Clone number	BLR236K
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human, Mouse
Dilution info	-
Notes	-

ICC

Tested

Species	Human, Mouse
Dilution info	-
Notes	-

IHC-P

Tested

Species	Mouse, Human
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

WB

Tested

Species	Mouse, Human
Dilution info	-
Notes	-

Target data

See full target information TUBB

Function	Tubulin is the major constituent of microtubules, a cylinder consisting of laterally associated linear protofilaments composed of alpha- and beta-tubulin heterodimers. Microtubules grow by the addition of GTP-tubulin dimers to the microtubule end, where a stabilizing cap forms. Below the cap, tubulin dimers are in GDP-bound state, owing to GTPase activity of alpha-tubulin.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	Up to 12 months
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Notes

REACH authorisation
Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.
It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Beta V tubulin also known as TUBB6 is a microtubule protein involved in the mechanical structure of cells. It plays a role in the formation of microtubules by polymerizing with alpha tubulin allowing tubulin dimers to stack into spirals that form hollow tubes. This protein has a molecular mass of approximately 49 kDa. Beta V tubulin is expressed in many tissues with higher levels observed in the human brain liver and testis.
Biological function summary	Beta V tubulin is important for maintaining cellular architecture and intracellular transport. It is an important component of the cytoskeleton a complex that provides support and shape to the cell and facilitates movement of organelles within the cell. Microtubules formed by beta V tubulin are essential for mitosis as

	they organize and separate chromosomes during cell division. This role connects beta V tubulin to cell cycle regulation and stability.
Pathways	Beta V tubulin participates in the microtubule organizing center pathways and impacts the cell cycle pathway. It interacts with proteins including kinesin and dynein which are motor proteins that move along microtubules to transport cellular cargo. These processes ensure proper cellular function by delivering necessary molecules and considering structural integrity linking beta V tubulin to essential cellular processes.
Associated diseases and disorders	Dysregulation of beta V tubulin has been linked to certain types of cancer particularly liver and breast cancer. It associates with p53 a protein critical for tumor suppression indicating a potential role in tumorigenesis. Additionally mutations in beta V tubulin can contribute to neurodevelopmental disorders due to its expression in the brain and its involvement in neuronal function. This association highlights the importance of beta V tubulin in both normal cellular functioning and disease development.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

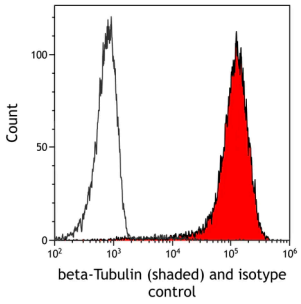
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

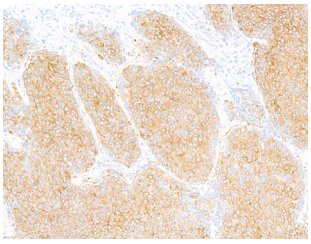
Full details and terms and conditions can be found here:
Terms & Conditions.

9 product images



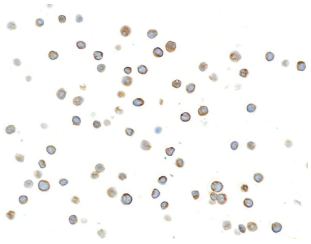
Flow Cytometry - Anti-beta-Tubulin antibody [BLR236K] - BSA free (ab314069)

Detection of human beta-Tubulin (shaded) in K562 cells by flow cytometry. Antibody: Rabbit anti-beta-Tubulin recombinant monoclonal antibody [BLR236K] (A700-236CF) or isotype control (unshaded). Secondary: DyLight® 650-conjugated goat anti-rabbit IgG.



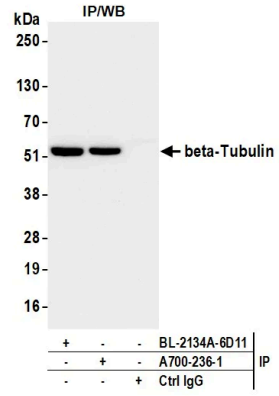
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta-Tubulin antibody [BLR236K] - BSA free (ab314069)

Detection of human beta-Tubulin by immunohistochemistry. Sample: FFPE section of lung carcinoma. Antibody: Rabbit anti-beta-Tubulin recombinant monoclonal antibody [BLR236K] (A700-236CF). Secondary: HRP-conjugated goat anti-rabbit IgG.



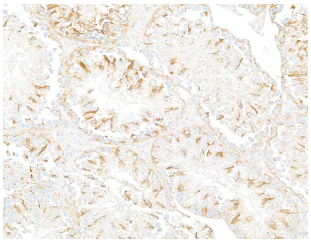
Immunocytochemistry - Anti-beta-Tubulin antibody [BLR236K] - BSA free (ab314069)

Detection of human beta-Tubulin by immunocytochemistry. Sample: FFPE section of MOLT-4 cells. Antibody: Rabbit anti-beta-Tubulin recombinant monoclonal antibody [BLR236K] (A700-236CF). Secondary: HRP-conjugated goat anti-rabbit IgG.



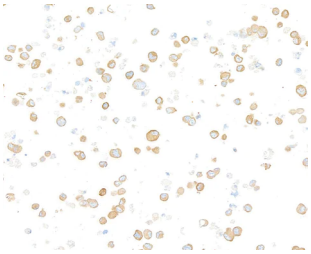
Immunoprecipitation - Anti-beta-Tubulin antibody [BLR236K] - BSA free (ab314069)

Samples: Whole cell lysate (1.0 mg per IP reaction; 20% of IP loaded) from Jurkat cells prepared using NETN lysis buffer. Antibodies: Rabbit anti-beta-Tubulin recombinant monoclonal antibody [BLR236K] (A700-236-1) used for IP at 20 µl/mg lysate. beta-Tubulin was also immunoprecipitated by a second antibody against a different epitope of beta-Tubulin (BL-2134A-6D11). For blotting immunoprecipitated beta-Tubulin, A700-236 was used at 1:1000. Detection: Chemiluminescence with an exposure time of 10 seconds.



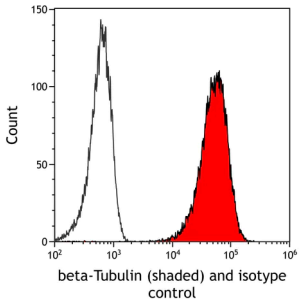
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta-Tubulin antibody [BLR236K] - BSA free (ab314069)

Detection of mouse beta-Tubulin by immunohistochemistry. Sample: FFPE section of mouse testis. Antibody: Rabbit anti-beta-Tubulin recombinant monoclonal antibody [BLR236K] (A700-236CF). Secondary: HRP-conjugated goat anti-rabbit IgG.



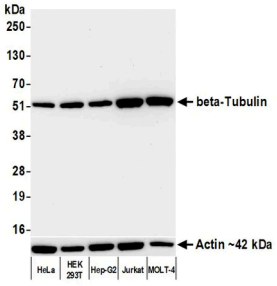
Immunocytochemistry - Anti-beta-Tubulin antibody [BLR236K] - BSA free (ab314069)

Detection of mouse beta-Tubulin by immunocytochemistry. Sample: FFPE section of ND7/23 cells. Antibody: Rabbit anti-beta-Tubulin recombinant monoclonal antibody [BLR236K] (A700-236CF). Secondary: HRP-conjugated goat anti-rabbit IgG.



Flow Cytometry - Anti-beta-Tubulin antibody [BLR236K] - BSA free (ab314069)

Detection of mouse beta-Tubulin (shaded) in A20 cells by flow cytometry. Antibody: Rabbit anti-beta-Tubulin recombinant monoclonal antibody [BLR236K] (A700-236CF) or isotype control (unshaded). Secondary: DyLight® 650-conjugated goat anti-rabbit IgG.



Western blot - Anti-beta-Tubulin antibody [BLR236K] - BSA free (ab314069)

Samples: Whole cell lysate (10 µg) from HeLa, HEK293T, Hep-G2, Jurkat, and MOLT-4 cells prepared using NETN lysis buffer. Antibody: Rabbit anti-beta-Tubulin recombinant monoclonal antibody [BLR236K] (A700-236CF) used at 1:1000. Secondary: HRP-conjugated goat anti-rabbit IgG. Detection: Chemiluminescence with an exposure time of 10 seconds. Lower Panel: Rabbit anti-Actin recombinant monoclonal antibody [BLR057F].
All lanes:
Western blot - Anti-beta-Tubulin antibody [BLR236K] - BSA free (ab314069) at 1/1000 dilution

Lane 1:
HeLa Whole cell lysate at 10 µg

Lane 2:
HEK293T Whole cell lysate at 10 µg

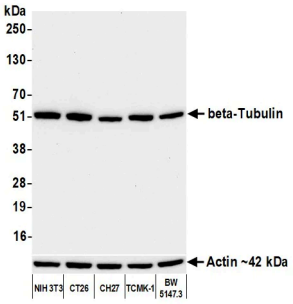
Lane 3:
Hep-G2 Whole cell lysate at 10 µg

Lane 4:
Jurkat Whole cell lysate at 10 µg

Lane 5:
MOLT-4 Whole cell lysate at 10 µg

Secondary

All lanes:
HRP-conjugated goat anti-rabbit IgG



Western blot - Anti-beta-Tubulin antibody [BLR236K] - BSA free (ab314069)

Samples: Whole cell lysate (10 µg) from NIH 3T3, CT26, CH27, TCMK-1, and BW5147.3 cells prepared using NETN lysis buffer. Antibody: Rabbit anti-beta-Tubulin recombinant monoclonal antibody [BLR236K] (A700-236 lot 1) used at 1:1000. Secondary: HRP-conjugated goat anti-rabbit IgG. Detection: Chemiluminescence with an exposure time of 10 seconds. Lower Panel: Rabbit anti-Actin recombinant monoclonal antibody [BLR057F].
All lanes:
Western blot - Anti-beta-Tubulin antibody [BLR236K] - BSA free (ab314069) at 1/1000 dilution

Lane 1:
NIH 3T3 Whole cell lysate at 10 µg

Lane 2:
CT26 Whole cell lysate at 10 µg

Lane 3:
CH27 Whole cell lysate at 10 µg

Lane 4:
TCMK-1 Whole cell lysate at 10 µg

Lane 5:
BW5147.3 Whole cell lysate at 10 µg

Secondary

All lanes:
HRP-conjugated goat anti-rabbit IgG

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.