

product **AS10 681**
Tubulin beta chain

product information

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| background | Tubulin beta (TUB) together with alpha tubulin is making up microtubules. |
| immunogen | <u>KLH</u> -conjugated peptide derived from available tubulin beta chain sequences (located at a surface loop) including all <i>Arabidopsis thaliana</i> tubulin beta-2/beta-3 chain P29512 , beta-4 chain P24636 , beta-5 chain P29513 , beta-6 chain P29514 , beta-7 chain P29515 , beta-8 chain P29516 , beta-9 chain P29517 . |
| antibody format | rabbit polyclonal affinity purified serum in PBS pH 7.4, lyophilized |
| quantity | 100 µg for reconstitution add 100 µl of sterile water |
| storage | store lyophilized/reconstituted at -20°C; once reconstituted make aliquots to avoid repeated freeze-thaw cycles. Please, remember to spin tubes briefly prior to opening them to avoid any losses that might occur from lyophilized material adhering to the cap or sides of the tubes. |
| tested applications | immunofluorescence (IF) |
| additional information | Please, note that tubulin beta is only detected in actively dividing meristematic cells (see immunolocalization image below). Therefore to allow detection on a western blot, analyzed material must contain enough meristematic cells with dividing activity. |

application information

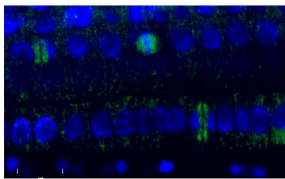
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| recommended dilution | 1: 1000 (IF) |
| expected apparent MW | 49 49 kDa (<i>Arabidopsis thaliana</i>) |
| confirmed reactivity | <i>Arabidopsis thaliana</i> (including suspension cells), <i>Medicago sativa</i> |
| predicted reactivity | dicots including: <i>Brassica napus</i> , <i>Glycine max</i> , <i>Pisum sativum</i> , <i>Solanum tuberosum</i> , <i>Sorghum bicolor</i> , <i>Ricinus communis</i> , <i>Vitis vinifera</i> , monocots including: <i>Hordeum vulgare</i> , <i>Oryza sativa</i> , <i>Zea mays</i> , trees: <i>Picea sitchensis</i> , <i>Populus trichocarpa</i> , moss: <i>Physcomitrella patens</i> , algae: <i>Chlamydomonas reinhardtii</i> , Micromonoas pusilla, <i>Ostreococcus lucimarinus</i> |

not reactive in | no confirmed exceptions from predicted reactivity known in the moment

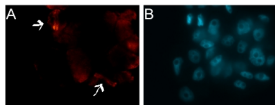
additional information | to be added when available

selected references | to be added when available, antibody released in September 2010

application example



Tubulin beta localization in *Arabidopsis thaliana* epidermis cells. Tubulin beta localized to division plates visualized in green, nucleus with DAPI in blue. Plant material has been fixed in para-formaldehyde for 30 minutes. Tissue cleaning has been performed before immunolocalization. Primary antibodies: Agrisera anti-tubulin beta primary antibody in dilution 1: 1000 and Agrisera goat anti-rabbit IgG DyLight® 488, secondary antibody in dilution 1: 2000. Scale bar – 10 µm.



(A) The 3 days old suspension cells of *Arabidopsis thaliana* have been fixed for 25 minutes with 2% FA, cell wall was partially digested with 0.2% Driselase in MES buffer (pH 5.1) for 30 min at 37°C and the cells were dried on coated slide to omit PM extraction. Following by incubation for 45 minutes with Agrisera anti-tubulin beta chain primary antibody in a dilution of 1: 1000, washing once and 45 min incubation with a secondary goat anti-rabbit Alexa 555 antibody, in a dilution of 1:1000 dilution (Invitrogen). Cells were counterstained with DAPI and visualized under epi/fluorescence microscope **(B)**.

Courtesy Dr. Taras Pasternak, Freiburg University, Germany