

product **AS10 702**
Actin-11

product information

background	Actin is a highly conserved protein and an essential component of cell cytoskeleton and plays an important role in cytoplasmic streaming, cell shape determination, cell division, organelle movement and extension growth. Preferentially expressed in young and expanding tissues, floral organ primordia, developing seeds and emerging inflorescence.
immunogen	full length <u>ACT11</u> (Actin-11) from <i>Arabidopsis thaliana</i> , accession number NP_187818.1
antibody format	mouse monoclonal IgG2b 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. Shelf life of this product is one year from the data of shipment.
tested applications	western blot (WB), immunofluorescence (IF)
related products	<u>AS13 2640</u> anti-ACT actin, rabbit antibody <u>AS10 681</u> Anti-tubulin beta chain, rabbit antibody <u>AS10 680</u> Anti-tubulin alpha chain, rabbit antibody
additional information	Antibody has been affinity purified.

application information

recommended dilution	1 : 1000 with standard ECL (WB), 1: 700 (IF)
expected apparent MW	41.6 45 kDa
confirmed reactivity	<i>Arabidopsis thaliana</i> , <i>Nepeta cataria</i> , <i>Nepeta rtanjensis</i> , <i>Nicotiana tabacum</i> , <i>Oryza sativa</i> , <i>Solanum tuberosum</i> , <i>Zea mays</i>
predicted reactivity	dicots including: <i>Glycine max</i> , <i>Pisum sativum</i> , <i>Ricinus communis</i> , monocots, trees: <i>Picea abies</i> , <i>Chlamydomonas reinhardtii</i>
not reactive in	no confirmed exceptions from predicted reactivity known in the moment
additional information	This antibody is not suitable as a loading control for tissues from various organs of cauliflower including seeds.
selected references	<u>Dmitrović et al. (2015)</u> . Essential oils of two <i>Nepeta</i> species inhibit growth and induce oxidative stress in ragweed (<i>Ambrosia artemisiifolia</i> L.) shoots in vitro. <i>Acta Physiologiae Plantarum</i> , February 2015, 37:64. <u>Weiste and Dröge-Laser (2014)</u> . The <i>Arabidopsis</i> transcription factor bZIP11 activates auxin-mediated transcription by recruiting the histone acetylation machinery. <i>Nat Commun.</i> 2014 May 27;5:3883. doi: 10.1038/ncomms4883. <u>Weits et al. (2014)</u> . Plant cysteine oxidases control the oxygen-dependent branch of the N-end-rule pathway. <i>Nat Commun.</i> 2014 Mar 6;5:3425. doi: 10.1038/ncomms4425.