

product **AS12 2102**

DCL1 | Dicer-like protein 1

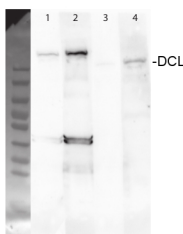
product information

background	DCL1 (EC=3.1.26) is a ribonuclease (RNase) III involved in RNA-mediated post-transcriptional gene silencing (PTGS). Functions in the microRNAs (miRNAs) biogenesis pathway by cleaving primary miRNAs (pri-miRNAs) and precursor miRNAs (pre-miRNAs). Synonyms: Protein ABNORMAL SUSPENSOR 1, Protein CARPEL FACTORY, Protein SHORT, INTEGUMENTS 1, Protein SUSPENSOR 1.
immunogen	<u>KLH</u> -conjugated synthetic peptide derived from <i>Arabidopsis thaliana</i> DCL1 sequence, <u>Q9SP32</u> , <u>At1g01040</u>
antibody format	rabbit polyclonal affinity purified serum lyophilized
quantity	200 µg for reconstitution add 200µl, 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	western blot (WB)
related products	<u>AS12 2103</u> DCL3 Dicer-like protein 3
additional information	Freezing and re-using of diluted anti-DCL1 antibodies is not recommended and will contribute to non-conclusive results.

application information

recommended dilution	1 : 1000 with standard ECL (WB)
expected apparent MW	213 kDa
confirmed reactivity	<i>Arabidopsis thaliana</i>
predicted reactivity	<i>Arabidopsis thaliana</i>
not reactive in	no confirmed exceptions from predicted reactivity are currently known
additional information	Recommend protein load is from 40-50 µg/well (using 1.5 mm spacers helps to obtain wider wells)
selected references	<u>Francisco-Mangilet</u> et al. (2015). THO2, core member of the THO/TREX complex, is required for micro RNA production in Arabidopsis. Plant J. 2015 May 14. doi: 10.1111/tpj.12874.

application example



50 µg of total protein from *Arabidopsis thaliana* total cell extract which came from the ground, frozen powder and has been directly transferred to 2x Laemmli sample buffer was separated on **4-20 % SDS-PAGE** and blotted over night at 64 mA to nitrocellulose (wet transfer). Blots were blocked with Roti-block over night at 4 °C agitation. Blot was incubated in the primary antibody at a dilution of 1: 2000 **(1)** and 1: 500 **(2)** 1h at RT with agitation. The antibody solution was decanted and the blot was rinsed briefly twice, then washed once for 15 min and 3 times for 5 min in PBS-T at RT with agitation. Blot was incubated in secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated, from Agrisera [AS09 602](#)) diluted to 1:10 000 for 1h at RT with agitation. The blot was washed as above and developed for 5 min with enhanced ECL kit according to the manufacturers instructions. Exposure time was 1 min.

Courtesy of Dr. Sascha Laubinger, ZMBP, Germany