

product **AS03 033**

Elip1 | early light inducible protein 1

product information

background	Early light-induced proteins (ELIPs) are light stress-induced proteins related to the chlorophyll a/b binding protein family from higher plants and green algae located in the thylakoid membranes and involved in photosynthesis.
immunogen	Short peptide chosen from a sequence of early light-induced protein 1 of <i>Arabidopsis thaliana</i> At3g22840
antibody format	rabbit polyclonal serum lyophilized
quantity	200 µl for reconstitution add 200 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	western blot (WB)
additional information	To obtain a signal with this antibody plants have to be exposed to a fluorescent light source HQI-E bulb 400W/D, above 800 mE.

application information

recommended dilution	1:500 (WB)
expected apparent MW	21 kDa
confirmed reactivity	<i>Arabidopsis thaliana</i>
predicted reactivity	does not apply
not reactive in	other plant species than <i>Arabidopsis thaliana</i>
additional information	Western blot images are presented in publications
selected references	Andersson et al. (2003) . Light stress-induced one-helix protein of the chlorophyll a/b-binding family associated with photosystem I. <i>Plant Physiol.</i> 132:811-820. Heddad & Adamska (2000) . Light stress-regulated two-helix proteins in <i>Arabidopsis thaliana</i> related to the chlorophyll a/b-binding gene family. <i>PNAS</i> 97:3741-3746.

application example

10 µg of total protein from (1) *Arabidopsis thaliana* leaf grown at 23°C, 8h low/moderate light, 16 h dark at 16°, extracted with **Protein Extraction Buffer, PEB (AS08 300)**, (2) *Arabidopsis thaliana* leaf subjected to a high light treatment at 710-725 µE for 2h, extracted with PEB, (3) *Arabidopsis thaliana* leaf subjected to a high light treatment at 710-725 µE for 4h, extracted with PEB, (4) *Arabidopsis thaliana* leaf subjected to a high light treatment at 710-725 µE for 8h, extracted with PEB were separated on **4-12% NuPage (Invitrogen) LDS-PAGE** and blotted 1h to **PVDF**. Blots were blocked immediately following transfer in 2% ECL Advance blocking reagent (GE Healthcare) in 20 mM Tris, 137 mM sodium chloride pH 7.6 with 0.1% (v/v) Tween-20 (TBS-T) for 1h at room temperature with agitation. Blots were incubated in the primary antibody at a dilution of 1: 10 000 for 1h at room temperature 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 TBS-T at room temperature with agitation. Blots were incubated in secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated, from Abcam) diluted to 1:20 000 in 2% ECL Advance blocking solution for 1h at room temperature with agitation. The blots were washed as above and developed for 5 min with ECL Advance detection reagent according to the manufacturers instructions. Images of the blots were obtained using a CCD imager (FluorSMax, Bio-Rad) and Quantity One software (Bio-Rad).

