

Product no **AS10 721**  
**PHOT2 | Phototropin-2**

## Product information

<b>Immunogen</b>	KLH-conjugated synthetic peptide derived from known <i>Arabidopsis thaliana</i> PHOT2 <a href="#">P93025</a> , <a href="#">At5g58140</a>
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Purity</b>	Serum
<b>Format</b>	Lyophilized
<b>Quantity</b>	50 µl
<b>Reconstitution</b>	For reconstitution add 100 µl of sterile water
<b>Storage</b>	Store lyophilized/reconstituted at -20°C; once reconstituted make aliquots to avoid repeated freeze-thaw cycles. Please remember to spin the tubes briefly prior to opening them to avoid any losses that might occur from material adhering to the cap or sides of the tube.
<b>Additional information</b>	This product can be sold containing ProClin if requested

## Application information

<b>Recommended dilution</b>	1 : 10 000 (WB)
<b>Expected   apparent MW</b>	102   110 kDa
<b>Confirmed reactivity</b>	<i>Arabidopsis thaliana</i>
<b>Predicted reactivity</b>	<i>Arabidopsis thaliana</i>
<b>Not reactive in</b>	<i>Oryza sativa</i>
<b>Additional information</b>	Recommended extraction protocol <a href="#">Sakamoto and Briggs 2002</a> . Antibody incubation buffer: PBS with 0.05 % Tween20.
<b>Selected references</b>	<a href="#">Labuz et al. (2024)</a> . Phototropin2 3'UTR overlaps with the AT5G58150 gene encoding an inactive RLK kinase. BMC Plant Biol. 2024 Jan 18;24(1):55. <a href="#">Labuz et al. (2021)</a> Phototropin interactions with SUMO proteins. Plant Cell Physiol. 2021 Feb 17;pcab027. doi: 10.1093/pcp/pcab027. Epub ahead of print. PMID: 33594440. <a href="#">Krzyszowiec et al. (2020)</a> . Chloroplasts in C3 grasses move in response to blue-light. Plant Cell Rep . 2020 Oct;39(10):1331-1343.doi: 10.1007/s00299-020-02567-3. Epub 2020 Jul 13. <a href="#">Labuz et al. (2015)</a> . The impact of temperature on blue light induced chloroplast movements in Arabidopsis thaliana. Plant Science, doi:10.1016/j.plantsci.2015.07.013. <a href="#">Aggarwal et al. (2014)</a> . Blue-light-activated phototropin2 trafficking from the cytoplasm to Golgi/post-Golgi vesicles. J Exp Bot. 2014 May 12.

## application example

80 µg of total protein from *Arabidopsis thaliana* wt Columbia (right lane) and *Arabidopsis thaliana phot1phot2* double mutant (left lane) were separated on 9% SDS-PAGE and blotted 2h to PVDF. Blots were blocked immediately following transfer in PBS-T 5% milk for 1h at room temperature with agitation. Blots were incubated in the primary antibody at a dilution of 1: 10 000 overnight at 4°C with agitation. The antibody solution was decanted and the blot was rinsed briefly, then washed 3 times for 5 min in PBS-T at room temperature with agitation. Blots were incubated in secondary antibody (goat anti- rabbit IgG horse radish peroxidase conjugated, from Agrisera [AS09 602](#)) diluted to 1:10 000 for 1h at room temperature with agitation. The blots were washed as above and developed with WestPico detection reagent (PIERCE) according to the manufacturers instructions. Exposure time was 300 seconds.

