

This product is for research use only (not for diagnostic or therapeutic use)

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Product no AS16 3157

Anti-PIF4 | Phytochrome interacting factor 4 (rabbit antibody)

Product information

Immunogen KLH-conjugated peptide derived from Arabidopsis thaliana PIF4, UniProt: Q8W2F3, TAIR:AT2G43010

Host Rabbit

Clonality Polyclonal

Purity Immunogen affinity purified serum in PBS pH 7.4.

Format Lyophilized

Quantity 50 μg

Reconstitution For reconstitution add 50 μl of sterile water

Storage Store lyophilized/reconstituted at -20°C; or

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.

Additional information PIF proteins are very unstable, therefore special precautions should be taken during extraction and whole procedure should be performed in the dark and with as little light as possible (green light only).

Extraction of PIF proteins is described in **Shen** et al. (2007).

This product can be sold containing ProClin if requested.

Application information

Recommended dilution 1: 1000 (WB)

Expected | apparent

48.3 | 60 kDa

Not reactive in Vitis vinifera

Selected references Gras et al. (2020). Arabidopsis Thaliana SURFEIT1-like Genes Link Mitochondrial Function to Early Plant Development and Hormonal Growth Responses. Plant J . 2020 Apr 5. doi: 10.1111/tpj.14762.

<u>Ferrero</u> et al. (2019). Class I TCP transcription factors target the gibberellin biosynthesis gene GA20ox1 and the growth promoting genes HBI1 and PRE6 during thermomorphogenic growth in Arabidopsis. Plant Cell Physiol. 2019 Jul 11. pii: pcz137. doi: 10.1093/pcp/pcz137.

<u>Hwang</u> et al. (2019). Trehalose-6-phosphate signaling regulates thermoresponsive hypocotyl growth in Arabidopsis thaliana. EMBO Rep. 2019 Aug 8:e47828. doi: 10.15252/embr.201947828.

Application example



5-20 µg of *Arabidopsis thaliana* nuclear proteins were extracted according to <u>Gendre</u>l et al. 2005. Samples were denatured with SDS page loading buffer at 90 °C for 5 min, separated on 12% SDS-PAGE and then blotted 1h to PVDF using wet transfer. Blot was blocked with 5% milk 1h at RT with agitation and then It was incubated with the anti-PIF4 antibody at a dilution of 1:1000 in TBS-T ON at 4 °C in agitation. The antibody solution was decanted and the blot was rinsed briefly with TBS-T, then washed 3 times for 15 min in TBS-T at RT with agitation. Blot was incubated in secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated) diluted to 1:25 000 in TBS-T for 1h/RT with agitation (Agrisera <u>AS09 602</u>). The blot was washed as above and developed with chemiluminescent ragent. Exposure time was 30 min.

Courtesy of Dr. Lucia Ferrero, Universidad Nacional del Litoral, Argentina