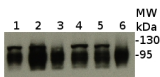


Product no **AS09 459****ClpB-P | ClpB3****Product information**

|                               |   |
|-------------------------------|---|
| <b>Immunogen</b>              | KLH-conjugated peptide derived from ClpB-P of <i>Arabidopsis thaliana</i> <a href="#">Q9LF37</a> , <a href="#">At5g15450</a>  |
| <b>Host</b>                   | Rabbit  |
| <b>Clonality</b>              | Polyclonal  |
| <b>Purity</b>                 | Serum   |
| <b>Format</b>                 | Lyophilized   |
| <b>Quantity</b>               | 100 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> | There is a cross-reacting band at ca. 95 kDa - therefore longer electrophoresis time is advised to obtain good separation   |

**Application information**

|                               |  |
|-------------------------------|--|
| <b>Recommended dilution</b>   | 1 : 1000 (WB)  |
| <b>Expected   apparent MW</b> | 108,9   100 kDa  |
| <b>Confirmed reactivity</b>   | <i>Arabidopsis thaliana</i>  |
| <b>Predicted reactivity</b>   | <i>Populus trichocarpa</i> , <i>Ricinus communis</i> , <i>Vitis vinifera</i><br>Species of your interest not listed? <a href="#">Contact us</a>  |
| <b>Not reactive in</b>        | No confirmed exceptions from predicted reactivity are currently known  |
| <b>Selected references</b>    | <a href="#">Jeran</a> et al. (2021) The PUB4 E3 Ubiquitin Ligase Is Responsible for the Variegated Phenotype Observed upon Alteration of Chloroplast Protein Homeostasis in Arabidopsis Cotyledons. <i>Genes</i> (Basel). 2021 Sep 6;12(9):1387. doi: 10.3390/genes12091387. PMID: 34573369; PMCID: PMC8464772.<br><a href="#">Tieu Ngoc</a> et al. (2020). N4-methylcytidine ribosomal RNA methylation in chloroplasts is crucial for chloroplast function, development, and abscisic acid response in Arabidopsis. <i>J Integr Plant Biol.</i> 2020 Sep 2. doi: 10.1111/jipb.13009. Epub ahead of print. PMID: 32876986.<br><a href="#">Han</a> et al. (2015). A nuclear-encoded chloroplast-targeted S1 RNA-binding domain protein affects chloroplast rRNA processing and is crucial for the normal growth of Arabidopsis thaliana. <i>Plant J.</i> 2015 Jul;83(2):277-89. doi: 10.1111/tpj.12889. Epub 2015 Jun 15. |

**Application example**

**10 µg** of total protein from 7 day old *Arabidopsis* plants grown at control conditions, 22°C wilde type, Columbia-9 (1), hot1-3, HSP101 null (2), clpBp-1, ClpBp null (3) and heat shocked at 38°C for 1.5 hour wilde type, Columbia-9 (4), hot1-3, HSP101 null (5), clpBp-1, ClpBp null (6) were separated on 7-16 % SDS-PAGE and blotted overnight to nitrocellulose membrane. Blots were blocked immediately following transfer in for 1h at room temperature with agitation. Blots were incubated in Agrisera anti-ClpB-P antibody (AS09 459) at a dilution of 1: 1000 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) diluted to 1:2500 in 5% dry milk blocking solution for 1h at room temperature with agitation. The blots were washed as above and developed for 5 min with ECL detection reagent according to the manufacturers instructions. Exposure time was 20 seconds.

Courtesy Minsoo Kim, University of Arizona, USA