

Product no **AS01 001****Anti-ClpC | Chloroplastic form of HSP100****Product information**

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| Immunogen | Recombinant ClpC (C-terminal domain overexpressed as fusion with maltose-binding protein), UniProt: Q55023 |
| Host | Rabbit |
| Clonality | Polyclonal |
| Purity | Serum |
| Format | Lyophilized |
| Quantity | 100 µl |
| Reconstitution | For reconstitution add 100 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 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 | Anti-ClpC antibodies will also recognize <i>Arabidopsis thaliana</i> isoform ClpC1 (At5g50920) and ClpC2 (At3g48870). |

Application information

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| Recommended dilution | 1 : 1000 (IHC), 1 : 5000 on 10 µg of total protein, (WB) |
| Expected apparent MW | 92 87 kDa |
| Confirmed reactivity | <i>Arabidopsis thaliana</i> , <i>Synechococcus sp.</i> , <i>Chlamydomonas reinhardtii</i> , <i>Streptomyces sp.</i> |
| Predicted reactivity | Algae (red), <i>Catalpa bungei</i> , <i>Hordeum vulgare</i> , <i>Nicotiana tabacum</i> , <i>Ostreococcus sp.</i> , <i>Oryza sativa</i> , <i>Populus trichocarpa</i> , <i>Physcomitrium patens</i> , <i>Pisum sativum</i> , <i>Solanum tuberosum</i> , <i>Zea mays</i> |
| | Species of your interest not listed? Contact us |
| Not reactive in | Different strains of <i>Mycobacterium smegmatis</i> |
| Selected references | <p>Mu et al. (2024). Plastid HSP90C C-terminal extension region plays a regulatory role in chaperone activity and client binding. <i>Plant J.</i> 2024 Jul 5. doi: 10.1111/tbj.16917.</p> <p>Jiang et al. (2020). Plastid chaperone HSP90C guides precursor proteins to the SEC translocase for thylakoid transport. <i>J Exp Bot.</i> 2020 Aug 27;eraa399. doi: 10.1093/jxb/eraa399.</p> <p>Lee et al. (2018). Prolines in Transit Peptides Are Crucial for Efficient Preprotein Translocation into Chloroplasts. <i>Plant Physiol.</i> 2018 Jan;176(1):663-677. doi: 10.1104/pp.17.01553. Epub 2017 Nov 20.</p> <p>Hu et al. (2015). Site-specific Nitrosoproteomic Identification of Endogenously S-Nitrosylated Proteins in Arabidopsis. <i>Plant Physiol.</i> 2015 Feb 19. pii: pp.00026.2015.</p> <p>Rosano et al. (2011). Insights into the Clp/HSP100 chaperone system from chloroplasts of Arabidopsis thaliana. <i>J Biol Chem.</i> Aug 26;286(34):29671-80. (Western blot, Arabidopsis thaliana)</p> <p>Karradt et al. (2008) NblA, a Key Protein of Phycobilisome Degradation, Interacts with ClpC, a HSP100 Chaperone Partner of a Cyanobacterial Clp Protease. <i>J Biol Chem</i> 283: 32394-32403.</p> |