

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

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

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>