

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

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## Product no AS07 253 Anti-HSP101 | ClpB heat shock protein, N-terminal (rabbit antibody)

## **Product information**

Immunogen	Recombinant Hsp101 N-terminal derived from the sequence of <i>Arabidopsis thaliana</i> Hsp101 protein P42730, At1g74310
Host	Rabbit
Clonality	Polyclonal
Purity	Serum
Format	Lyophilized
Quantity	50 μl
Reconstitution	For reconstitution add 50 $\mu$ l 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.

## **Application information**

Recommended dilution	1 : 1000 (WB)
Expected   apparent MW	101 kDa
Confirmed reactivity	Arabidopsis thaliana, Agave tequilana,Brassica oleracea, Oryza sativa, Solanum lycopersicum, Thellungiella salsuginea, Triticum aestivum, Vicia faba
Predicted reactivity	Dicots, including: <i>Glycine max, Vitis vinifera</i> , monocot <i>s</i>
Not reactive in	No confirmed exceptions from predicted reactivity are currently known
Selected references	Li et al. (2025). Blocking constitutive autophagy rescues the loss of acquired heat resistance in Arabidopsis fes1a. New Phytologist, Volume245, Issue6 March 2025. Pages 2569-2583. Szadeczky-Kardoss et al. (2022) Elongation factor TFIIS is essential for heat stress adaptation in plants. Nucleic Acids Res. 2022 Feb 28;50(4):1927-1950. doi: 10.1093/nar/gkac020. PMID: 35100405; PMCID: PMC8886746. Wang et al. (2022) 17-(Allylamino)-17-demethoxygeldanamycin treatment induces the accumulation of heat shock proteins and alleviates senescence in broccoli. Postharvest Biology and Technology,Volume 186, 2022, 111818, ISSN 0925-5214, https://doi.org/10.1016/j.postharvbio.2021.111818. <u>Fedotova</u> et al. (2020). Influence of high temperatures on heat tolerance and synthesis of heat shock proteins in spring wheat at the initial stages of development // Siberian Journal of Life Sciences and Agriculture. 2020.12, 5. C. 179-191. DOI: 10.12731/2658-6649-2020-12-5-179-191 <u>Gorovits</u> et al. (2020). Pharmaceuticals in treated wastewater induce a stress response in tomato plants. Sci Rep. 2020 Feb 5;10(1):1856. doi: 10.1038/s41598-020-58776-z. <u>McLoughlin</u> et al. (2019) HSP101 Interacts with the Proteasome and Promotes the Clearance of Ubiquitylated Protein Aggregates. Plant Physiol. 2019 Aug;180(4):1829-1847. doi: 10.1104/pp.19.00263



**2 μg of total protein** from (1) *Arabidopsis thaliana* WT stressed at 38°C for 1.5 hour, (2) *Arabidopsis thaliana* HSP101 null mutant (hot 1-3) were separated on **7.5% SDS-PAGE** and blotted 1h to **nitrocellulose** (Biorad). Blots were incubated in the primary antibody at a dilution of 1: 1 000 for 1h at room temperature with agitation and secondary HRP-conjugated antibody (1: 10 000).