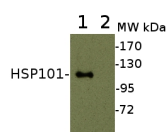


Product no **AS07 253****Anti-HSP101 | ClpB heat shock protein, N-terminal (rabbit antibody)****Product information**

<b>Immunogen</b>	Recombinant Hsp101 N-terminal derived from the sequence of <i>Arabidopsis thaliana</i> Hsp101 protein <a href="#">P42730</a> , <a href="#">At1g74310</a>
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Purity</b>	Serum
<b>Format</b>	Lyophilized
<b>Quantity</b>	50 µl
<b>Reconstitution</b>	For reconstitution add 50 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.

**Application information**

<b>Recommended dilution</b>	1 : 1000 (WB)
<b>Expected   apparent MW</b>	101 kDa
<b>Confirmed reactivity</b>	<i>Arabidopsis thaliana</i> , <i>Agave tequilana</i> , <i>Brassica oleracea</i> , <i>Oryza sativa</i> , <i>Solanum lycopersicum</i> , <i>Thellungiella salsuginea</i> , <i>Triticum aestivum</i> , <i>Vicia faba</i>
<b>Predicted reactivity</b>	Dicots, including: <i>Glycine max</i> , <i>Vitis vinifera</i> , monocots  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="#">Szaker et al. (2025)</a> . Transcription fidelity and control of alternative splicing contribute to heat stress survival in <i>Arabidopsis</i> . <i>Plant Cell</i> . 2025 Oct 28:koaf256.doi: 10.1093/plcell/koaf256. <a href="#">Li et al. (2025)</a> . Blocking constitutive autophagy rescues the loss of acquired heat resistance in <i>Arabidopsis fes1a</i> . <i>New Phytologist</i> , Volume 245, Issue 6 March 2025. Pages 2569-2583. <a href="#">Szadeczky-Kardoss et al. (2022)</a> Elongation factor TFII5 is essential for heat stress adaptation in plants. <i>Nucleic Acids Res.</i> 2022 Feb 28;50(4):1927-1950. doi: 10.1093/nar/gkac020. PMID: 35100405; PMCID: PMC8886746. <a href="#">Wang et al. (2022)</a> 17-(Allylamino)-17-demethoxygeldanamycin treatment induces the accumulation of heat shock proteins and alleviates senescence in broccoli. <i>Postharvest Biology and Technology</i> , Volume 186, 2022, 111818, ISSN 0925-5214, <a href="https://doi.org/10.1016/j.postharvbio.2021.111818">https://doi.org/10.1016/j.postharvbio.2021.111818</a> . <a href="#">Fedotova et al. (2020)</a> . Influence of high temperatures on heat tolerance and synthesis of heat shock proteins in spring wheat at the initial stages of development // <i>Siberian Journal of Life Sciences and Agriculture</i> . 2020.12, 5. C. 179-191. DOI: 10.12731/2658-6649-2020-12-5-179-191 <a href="#">Gorovits et al. (2020)</a> . Pharmaceuticals in treated wastewater induce a stress response in tomato plants. <i>Sci Rep.</i> 2020 Feb 5;10(1):1856. doi: 10.1038/s41598-020-58776-z. <a href="#">McLoughlin et al. (2019)</a> HSP101 Interacts with the Proteasome and Promotes the Clearance of Ubiquitylated Protein Aggregates. <i>Plant Physiol.</i> 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).