DATA SHEET

product **AS07 253**

HSP101 | ClpB heat shock protein, N-terminal

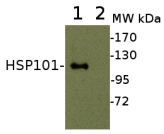
product information

background	**Hsp101/ClpB** is a member of HSP100 protein family. These proteins help protein aggregates formed during heat stress to fall apart to allow them to be refolded by other chaperones. HSP101 is a cytosolic heat shock protein required for acclimation to high temperature.
immunogen	recombinant Hsp101 N-terminal derived from the sequence of *Arabidopsis thaliana* Hsp101 protein P42730
antibody format	rabbit polyclonal serum lyophilized
quantity	200 µl for reconstitution add 200 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 tubes briefly prior to opening them to avoid any losses that might occur from lyophilized material adhering to the cap or sides of the tubes.
tested applications	western blot (WB)
additional information	to be added when available

application information

recommended dilution	1: 1000 with standard ECL (WB)
expected | apparent MW	101 kDa
confirmed reactivity	*Arabidopsis thaliana, Agave tequilana*
predicted reactivity	dicots including: *Glycine max, Nicotiana tabacum, Vitis vinifera*, monocots including: *Oryza sativa*
not reactive in	no confirmed exceptions from predicted reactivity known in the moment
additional information	to be added when available
selected references	Vainonen et al. (2011). RCD1-DREB2A interaction in leaf senescence and stress responses in Arabidopsis thaliana. Biochem. J. Dec 12 (ahead of print). Zhang et al. (2010). The role of Arabidopsis AtFes1A in cytosolic Hsp70 stability and abiotic stress tolerance. Plant J. 1;62(4):539-48. Luján et al. (2009). Small heat-shock proteins and leaf cooling capacity account for the unusual heat tolerance of the central spike leaves in Agave tequilana var. Weber. Plant Cell Environ. 32(12):1791-803.

application example



2 µg of total protein from (**1**) *Arabidopsis thaliana* WT stressed at 38ºC 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 from Abcam).

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