

Anti-Hsp101/ ClpB NT (plant)

Catalog# SPC-304B

Size: 200µl

PO Box 55036, Cadboro Bay
3825 Cadboro Bay Road,
Victoria, BC, V8N 4G0, Canada

This product is for *in vitro* research use only and is not intended for use in humans or animals

StressMarq

Biosciences Inc.

Orders • sales@stressmarq.com
Tel: • +1 250 294 9065
Fax: • +1 250 294 9025
Email • info@stressmarq.com
Web • www.stressmarq.com

| | |
|--------------------------|--|
| Product | Rabbit anti-Hsp101/ ClpB- N terminal antibody; polyclonal |
| Clone | N/A |
| Immunogen | Recombinant Arabidopsis Hsp101/ClpB, N-terminal Protein thaliana |
| Host and Subclass | Rabbit |
| Cited Applications | WB |
| Specificity | ~101kDa |
| Species cross-reactivity | <i>Arabidopsis thaliana</i> , <i>Agave tequilana</i> (monocot) |
| Format | Lyophilized rabbit serum (For reconstitution add 200uL of sterile water) |
| Working dilution | Recommended dilution for WB 1:1000 with ECL |
| Storage and stability | -20 °C; 1 year+; shipped on cold packs or ambient |

Scientific Background

Hsps/chaperones are known to be expressed in plants not only when they experience high temperatures stress, but also in response to a wide range of other environmental

stresses such as water stress, salt stress, cold stress and oxidative stress (1, 2). Hsp100 is one such major class that acts as a chaperone. Hsp101/ClpB is a member of this Hsp100 family. These proteins help dissociate protein aggregates formed during heat stress to allow them to be refolded by other chaperones. In spite of expression during heat stress, members of Hsp100 protein family are also expressed during seed development. Hsp101 protein is localized in a cytoplasm.

Selected References

1. Vierling E. (1991) *Annu Rev. Plant Physiol. Plant Mol. Biol.* 42: 579-620.
2. Waters W., et al. (2004) *Trends Plant Sci.* 9: 244-252.

Certificate of Analysis

1ul/ml of SPC-304 was sufficient for detection of Hsp101 in 2ug of *Arabidopsis thaliana* WT lysate stressed at 38 °C for 1.5 hours by colorimetric immunoblot analysis using Goat anti-rabbit IgG:HRP as the secondary antibody.

Material Safety Data Sheet

Anti-Hsp101/ ClpB-NT (Polyclonal Antibody) SPC-304

This product is for *in vitro* research use only and is not intended for use in humans or animals

The below information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. StressMarq shall not be held liable for any damage resulting from handling or from contact with the above product. See the Technical Specification, Packing Slip, Invoice, and Product Catalogue for additional terms and conditions of sale.

Hazardous Ingredients

The physical, chemical and toxicological properties of these components have not been fully investigated. It is recommended that all laboratory personnel follow standard laboratory safety procedures when handling this product. Safety procedures should include wearing OSHA approved safety glasses, gloves and protective clothing. Direct physical contact with this product should be avoided.

| <u>Known Hazardous Components</u> | <u>CAS Number</u> | <u>Percent</u> |
|-----------------------------------|-------------------|----------------|
| None | | |

Physical Data

This product consists of lyophilized rabbit sera shipped on gel packs. The physical properties of this product have not been investigated thoroughly.

Fire and Explosion Hazard and Reactivity Data

NOT APPLICABLE

Toxicological Properties

May be harmful by inhalation, ingestion, or skin absorption. The toxicological properties of this product have not been investigated thoroughly. Exercise due caution.

Preventative Measures

Wear chemical safety goggles and compatible chemical-resistant gloves. Avoid inhalation, contact with eyes, skin or clothing.

Spill and Leak Procedures

Observe all federal, state and local environmental regulations.

- Wear protective equipment.
- Absorb on sand or vermiculite and place in closed containers for disposal.
- Dispose or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

First Aid Measures

- If swallowed, wash out mouth with water, provided person is conscious. Call a physician.
- In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. If a rash or other irritation develops, call a physician.
- If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
- In case of eye contact, flush with copious amounts of water for at least 15 minutes while separating the eyelids with fingers. Call a physician.

Authorized: StressMarq Biosciences Inc.
Creation Date: 12/12/2008