

# Anti-Hsp101/ ClpB-CT (maize)

Catalog# SPC-306B

Size: 200µL

PO Box 30244, Suite 405,  
3989 Quadra Street,  
Victoria, BC V8X 5E1, 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](mailto:sales@stressmarq.com)

Tel: • +1 250 294 9065

Fax: • +1 250 294 9025

Email • [info@stressmarq.com](mailto:info@stressmarq.com)

Web • [www.stressmarq.com](http://www.stressmarq.com)

Product	Rabbit anti-Hsp101/ ClpB- C-terminal antibody; polyclonal
Clone	N/A
Immunogen	15aa peptide sequence from the C-terminus of maize Hsp101 (1) Gene accession number: AF077337 (2).
Host and Subclass	Rabbit
Cited Applications	WB
Specificity	~101kDa
Species cross-reactivity	<i>Zea mays</i> . No reactivity to other cereal Hsp101
Format	Lyophilized rabbit serum (For reconstitution add 200uL of sterile water)
Working dilution	Recommended dilution for WB 1:2000 with ECL or AP
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 (2, 3). 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 both nuclear and cytoplasmic-localized (1, 4).

### Selected References

1. Nieto-Sotelo J., *et al.* (2002) *Plant Cell*. 14: 1621-1633.
2. Vierling E. (1991) *Annu Rev. Plant Physiol. Plant Mol. Biol.* 42: 579-620.
3. Waters W., *et al.* (2004) *Trends Plant Sci.* 9: 244-252.
4. Nieto-Sotelo J., Kannan K.B., Martinex L.M. and Segal C. (1999) *Gene*. 230: 187-195.

### Certificate of Analysis

\*\*\*\*\*  
0.7ul/ml of SPC-306 was sufficient for detection of Hsp101 in 30ug of mature embryo maize extracts by colorimetric immunoblot analysis using Goat anti-rabbit IgG:HRP as the secondary antibody.  
\*\*\*\*\*

# Material Safety Data Sheet

## Anti-Hsp101/ ClpB-CT (Polyclonal Antibody) SPC-306

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