



# Mouse Anti-Chlamydial HSP60 monoclonal antibody, clone B68-C0 (CABT-RM143)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Specificity</b>	Detects Chlamydial HSP60. It targets an epitope with in 144 amino acids in the carboxy terminal of HSP60.
<b>Target</b>	Chlamydial HSP60
<b>Immunogen</b>	Recombinant Chlamydia trachomatis serovar A HSP60 emulsified in complete Freund adjuvant.
<b>Isotype</b>	IgG1, κ
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Bacteria (Chlamydia genus)
<b>Clone</b>	B68-C0
<b>Purification</b>	Protein G purified
<b>Conjugate</b>	unconjugated
<b>Applications</b>	ELISA, IF, ICC, WB
<b>Molecular Weight</b>	~60 kDa observed. Uncharacterized bands may be observed in some lysate(s).
<b>Format</b>	Liquid
<b>Size</b>	100 µg
<b>Buffer</b>	0.1 M Tris-Glycine (pH 7.4), 150 mM NaCl
<b>Preservative</b>	0.05% sodium azide

**Storage**

Stable for 1 year at 2-8°C from date of receipt.

---

## BACKGROUND

**Introduction**

*Chlamydia trachomatis* is a Gram-negative bacterium that is responsible to sexually transmitted diseases leading to pelvic inflammatory disease, ectopic pregnancy, infertility, and outbreaks of trachoma-associated blindness and lymphogranuloma venereum (LGV). *Chlamydia trachomatis* consists of eighteen different serological variants (serovars) that include a few subvariants. These are identified based on serological reactivity of the epitopes on their outer membrane. Intracellularly chlamydia replicates within a vacuole. *Chlamydia* infection is initiated with the expression of a chlamydial early gene product(s), which isolate the inclusion from the endocytic-lysosomal pathway and makes it fusogenic with sphingomyelin-containing exocytic vesicles. This change in vesicular interaction allows the delivery of the vacuole to the peri-Golgi region of the host cell. Antigens from all members of the *Chlamydia* genus display heat resistance and sensitivity to oxidation by sodium periodate. HSP60 facilitates the correct folding of imported proteins and may prevent misfolding and promote the refolding and proper assembly of unfolded polypeptides generated under stress conditions.

---

**Keywords**

60 kDa chaperonin; HSP60; Heat Shock Protein 60; CPN60; Chlamydial; *Chlamydia trachomatis*

---