



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

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

BACKGROUND

Introduction

Chlamydia trachomatis is a Gram-negative bacterium that is responsible for 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*
