



Chimeric Mouse Anti-C. perfringens epsilon toxin (ETX) monoclonal antibody, clone 1351 (CABT-L2597)

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

PRODUCT INFORMATION

Product Overview	Murine variable, human constant of the IgG1 isotype. A chimeric IgG produced in N. benthamiana and is reactive to C. perfringens ETX
Specificity	This monoclonal is a potent neutralizer of toxin (IC50 = 20 ng/ml) in vitro and protects mice against ETX challenge.
Immunogen	Recombinant C. perfringens ETX
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	C. perfringens
Clone	1351
Purification	Protein A purified
Conjugate	Unconjugated
Applications	ELISA
Format	Liquid
Concentration	Lot specific
Size	100 µg
Buffer	PBS

Preservative	0.1% Sodium Azide
Storage	-20°C. Avoid Freeze/Thaw Cycles

BACKGROUND

Introduction

Clostridium perfringens is a Gram-positive, rod-shaped, anaerobic, spore-forming bacterium of the genus *Clostridium*. *C. perfringens* is ubiquitous in nature and can be found as a normal component of decaying vegetation, marine sediment, the intestinal tract of humans and other vertebrates, insects, and soil. *C. perfringens* is commonly encountered in infections as a benign component of the normal flora. In this case, its role in disease is minor. Infections due to *C. perfringens* show evidence of tissue necrosis, bacteremia, emphysematous cholecystitis, and gas gangrene, which is also known as clostridial myonecrosis. The toxin involved in gas gangrene is known as alpha toxin, which inserts into the plasma membrane of cells, producing gaps in the membrane that disrupt normal cellular function. *C. perfringens* bacteria are the third most common cause of food-borne illness, with poorly prepared meat and poultry the main culprits in harboring the bacterium. The *Clostridium perfringens* enterotoxin (CPE) mediating the disease is often heat-resistant and can be detected in contaminated food and feces.

Keywords

Clostridium perfringens; *C. perfringens*; *Clostridium*; *C. perfringens* Neuraminidase protein; *Clostridium perfringens* N-acetyl-neuraminyl hydrolase protein; Neuraminidase; N-acetyl-neuraminyl hydrolase