



Mouse Anti-CHIKV Monoclonal Antibody, Clone 4F8C (CABT-CS648)

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

PRODUCT INFORMATION

Specificity	Chikungunya virus E2 protein
Target	CHIKV E2
Isotype	IgMk
Source/Host	Mouse
Species Reactivity	CHIKV
Clone	4F8C
Purification	Purified by ion-exchange chromatography
Conjugate	unconjugated
Applications	ELISA, ICC, Neut, WB
Format	Liquid
Size	25 µl
Buffer	PBS
Preservative	None
Storage	Stable for 1 year at -20°C from date of receipt. Handling Recommendations: Upon receipt and prior to removing the cap, centrifuge the vial and gently mix the solution. Aliquot into microcentrifuge tubes and store at -20°C. Avoid repeated freeze/thaw cycles.

BACKGROUND

Introduction

Chikungunya virus (CHIKV) that causes distinctive polyarthrititis or polyarthralgia with clinical features such as fever, maculopapular rash, and myalgia is transmitted by *Aedes* spp of mosquitoes. Immune compromised individuals may face serious complications, including encephalitis and mortality. CHIKV genome contains a single-stranded positive-sense RNA that encodes four non-structural proteins known as nsP1, nsP2, nsP3, and nsP4 and also five structural proteins that include a capsid protein, three envelope glycoproteins known as (E1, E2, and E3, and a small molecule known as 6K. The mature alphavirus particles express E1 and E2 heterodimers that form 80 trimeric spikes on the surface of the virion. The ectodomain E1 protein consists of three domains known as D1, DII, and DIII. The DIII domain is an immunoglobulin-like domain connected to D1 and DII by a flexible linker. Both E1 and E2 proteins are responsible for virus entry into host cells. The E2 glycoprotein interacts with a cellular receptor, resulting in the virus internalization and the E1 glycoprotein mediates virus fusion to host cell under low pH conditions. Following the fusion of the viral envelope with the endosomal membrane, the viral genomic RNA is released into the cytoplasm and starts replicating.

Keywords

Chikungunya virus; Chikungunya; CHIKV
