

Anti-Chikungunya Virus Capsid antibody, mouse monoclonal (CV-901)

Product code	65-420
Size	100 µg
Storage	-20°C
Concentration	1.0 mg/ml
Buffer	PBS- with 50% glycerol
Purity	Purified recombinant Chikungunya virus (CHIKV) capsid protein
Immunogen	Synthetic peptide containing phosph-Ser20
Isotype	Mouse IgG1κ
Reactivity	Capsid protein of CHIKV
Special notes	Epitope: Major domain (amino acid 1 to 261) of CHIKV capsid protein.
Application	<ol style="list-style-type: none"> 1. Western blot (1/500~1/1,000) 2. Immunofluorescence staining (1/500) 3. ELISA (assay dependent) Other applications have not been tested.
Background	<p>Chikungunya virus (CHIKV) is the aetiological agent of chikungunya fever, which is a mosquito-borne pathogen responsible for epidemics of debilitating arthritic disease. CHIKV belongs to the Alphavirus genus within the Togaviridae family and is an enveloped, single-stranded positive-sense RNA virus. The alphavirus genome encodes four non-structural proteins (nsP1 to nsP4) and five structural proteins (capsid, E3, E2, 6K and E1). The alphavirus capsid protein (CP) is a multifunctional protein that has been shown to act as a serine protease for self-cleavage, bind viral genomic RNA and other CP molecules during nucleocapsid formation, and interact with viral spike proteins during virion formation and egress. The CP of CHIKV consists of 261 amino acids, which form two major domains. The N-terminal domain has a high degree of positive charge implicated in non-specific RNA binding, while the C-terminal domain harbors the globular protease and the binding site for the spike protein.</p>
Data Link	UniProtKB: Q5XXP3(POLS-CHIK3)
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	

Data Images: 65-420 Anti-Chickungunya Virus Capsid antibody, mouse monoclonal (CV-901)

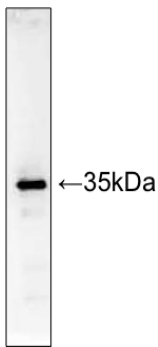


Fig.1. Identification of protein in CHIKV by Western blotting using monoclonal antibody.

The lysates of recombinant CHIKV protein (0.5mg/ml) were applied to SDS-PAGE. The monoclonal antibody was used at 1/500 dilution. The HRP-conjugated goat anti-mouse IgG (abcom) was used at 1/4,000 as the second antibody. A 34-35kDa band was identified as CHIKV capsid protein.

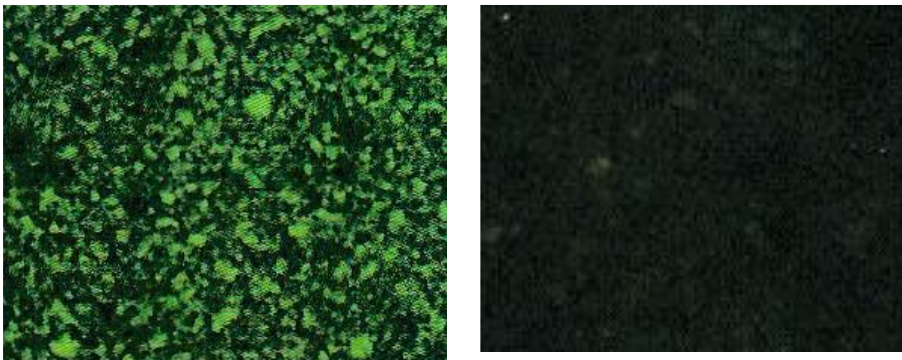


Fig.2. Detection of CHIKV capsid protein in CHIKV-infected cells (C6/36) by immunofluorescence staining. CHIKV infected cells (a) and uninfected cells (b) on a slide glass were fixed with acetone. The MAb was used at 1/500 dilution. The FITC-conjugated rabbit anti-mouse IgG (abcom) was used at 1/4,000 as the second antibody.

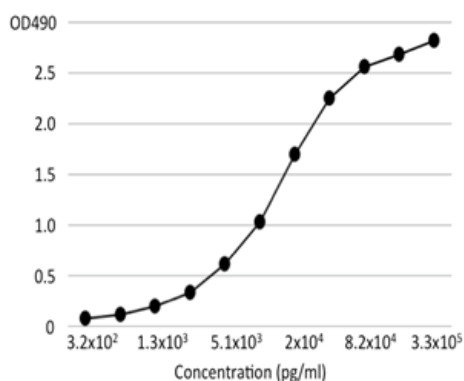


Fig.3. Titration of protein concentration of CHIKV by indirect ELISA using monoclonal antibody

The indicated amounts of recombinant CHIKV were coated onto the wells of the ELISA plate. After blocking with 5% skim milk, monoclonal antibody at the 1/5,000 dilution was added to the each well. HRP-conjugated goat anti-mouse IgG (100µl, x4,000 dilution, abcom) was added. As substrate, orthophenylenediamine was used. Optical density (OD) measured at 490nm.

Reference: This antibody has not been used in publication yet.