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12-8127: Anti-Dengue Virus (Clone: DENV-1C19)

Clonality :	Monoclonal
Clone Name :	DENV-1C19
Application :	ELISA
Alternative Name :	DENV
Isotype :	Human IgG1
Immunogen Information :	DENV-1C19 was generated as part of a large panel of cross-neutralizing human monoclonal antibodies derived from human subjects who were confirmed to have had DENV infection by testing their serum for the presence of antibodies that neutralized each of the DENV serotypes 1.

Description

Reactivity Species : Dengue·Virus
Expression Host : HEK-293
Endotoxin Level : ≤ 1.0 EU/mg as determined by the LAL method
DENV-1C19 activity is directed against the bc loop of domain II of the E glycoprotein adjacent to the fusion loop (FL), is quaternary structure dependent, and cross-reactive against DENV-1, 2, 3, 4.
Specificity: DENV-1C19 exhibited ultrahigh neutralization potency against strains corresponding to all four DENV serotypes. Fine epitope mapping studies revealed that DENV-1C19 recognizes a novel conserved site known as the bc loop (amino acids 73-79) adjacent to the fusion loop (FL) of DENV E protein in the DI/II hinge region. The bc loop residues 73, 78, and 79 have been identified as critical residues by loss-of-function binding screens. DENV-1C19 does not directly bind the FL and was unable to bind to wild-type E protein of West Nile Virus. DENV-1C19 binding was also not affected by alterations in DII-FL residues in yeast surface display or shotgun mutagenesis screenings.
DENV-1C19 neutralizes DENV effectively and competes for binding against low-potency FL antibodies, which are believed to contribute to antibody-mediated disease1. When DENV-1C19 was tested in AG129 mice for protective efficacy, it reduced the level of viremia after sublethal virus challenge for DENV-1 and -2. DENV-1C19 was able to bind to four chimeric yellow fever-dengue vaccine viruses and detected all four serotypes equally in a dot plot.

Product Info

Amount :	100 µg
Purification :	â‰¥95% monomer by analytical SEC
Content :	â‰¥ 5.0 mg/ml; Formulation : This recombinant monoclonal antibody is aseptically packaged and formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.2 - 7.4 with no carrier protein, potassium, calcium or preservatives added.
Storage condition :	Functional grade preclinical antibodies may be stored sterile as received at 2-8°C for up to one year. For longer term storage, aseptically aliquot in working volumes without diluting and store at â‰¥ -70°C. Avoid Repeated Freeze Thaw Cycles.