

## Antibody Datasheet / Certificate of Analysis

<b>Product Name:</b>	Mouse anti-Dengue virus prM protein (serotypes 1-4)
<b>Clone number:</b>	CC5.A9.E10
<b>Isotype:</b>	Mouse IgG1
<b>Product code:</b>	MAB12136-100
<b>Batch Number:</b>	18030113
<b>Immunogen:</b>	Recombinant Dengue virus Virus-like particles, a mixture of serotypes 1-4, from the Native Antigen Company
<b>Amount:</b>	100ug
<b>Concentration:</b>	1.7mg/ml
<b>Buffer:</b>	Phosphate Buffered Saline pH7.4
<b>Preservative:</b>	None present
<b>Purification:</b>	Antibody was purified by affinity chromatography on Protein G
<b>Specificity:</b>	<p>This antibody is specific for Dengue virus, binding to all serotypes in ELISA assay.</p> <p>The antibody has been shown to bind specifically to the prM protein in Western blot analysis. In Western blot binding to serotype 4 is weak or negligible.</p>

**Applications:** Direct ELISA (VLP antigen bound to plate)  
Western Blot using reducing conditions

**Antigen background:** Dengue virus (DENV) is a single-stranded RNA virus that belongs to the genus Flavivirus, which includes Zika virus, West Nile virus and Japanese Encephalitis virus. Dengue virus infection is transmitted to humans by mosquitoes, primarily *Aedes aegypti* species. It is a febrile illness that affects infants, young children and adults with symptoms appearing 3-14 days after the infective bite. Symptoms range from mild fever, to incapacitating high fever, with severe headache, pain behind the eyes, muscle and joint pain, and rash. Severe dengue (also known as dengue hemorrhagic fever) is a potentially lethal complication that is characterized by fever, abdominal pain, persistent vomiting, bleeding and breathing difficulty (1). Dengue virus infection is caused by any one of four related viruses DEN-1, DEN-2, DEN-3 and DEN-4, also referred to as serotypes, which co-circulate in endemic areas. Infection with one dengue serotype confers lifelong immunity but subsequent infection with other dengue serotypes is associated with an increased risk of developing severe dengue disease. Early clinical diagnosis and careful clinical management are essential for increasing patient survival.

With more than one-third of the world's population living in areas at risk of transmission, dengue infection is a leading cause of illness and death in the tropics and subtropics (*ref WHO for Guidelines for Diagnosis, Treatment, Prevention & Control, 2009*) As many as 100 million people are infected yearly. Dengue is caused by any one of four related viruses transmitted by mosquitoes. There are no vaccines available to prevent infection with dengue virus.

**Storage:** Store at +4<sup>0</sup>C for up to three months, or at -20<sup>0</sup>C for longer periods  
The antibody is shipped at ambient temperature.  
Avoid repeated freeze/thaw cycles.