ANTIGEN CAPTURE ANTI-DENGUE IgA ELISA (ACA-ELISA) FOR THE DETECTION OF A FLAVIVIRUS SPECIFIC ANTIBODY

ABSTRACT

An antigen capture IgA Enzyme Linked Immunosorbent Assay (ACA-ELISA) was developed for the detection of anti-flavivirus IgA. The assay utilizes flavivirus lysate antigen, preferably dengue virus lysate antigen captured by a monoclonal antibody. Captured anti-flavivirus IgA from test sera are preferably detected using rabbit anti-IgA conjugated with a reporter group such as horseradish peroxidase (HRP). The assay was found to be at least 8 times more sensitive than anti-human IgA capture ELISA (AAC-ELISA).

The ACA-ELISA, based either on serum or saliva, was found to be more sensitive and rapid compared to the "gold standard" anti-dengue IgM detection technique and can be utilized as a diagnostic tool for the confirmation of dengue in the early phase of infection.

Figure 1