Diagnostic ELISA for detection of IgM antibodies against Dengue virus

Domain: Diagnostic (Assay/Kit)

About Technology: IgM antibodies in the patient's serum (if present) and IgM from Positive Control are captured by anti-human IgM (μ chain specific) coated on to the solid surface (wells). In the next step, DEN antigen (inactivated dengue virus) is added which binds to captured human dengue specific IgM. Unbound antigen is removed during the washing step. In the subsequent step biotinylated anti-DEN monoclonal antibodies are added. After incubation & washing, the step is followed by addition of Avidin-HRP. Subsequently, chromogenic substrate (TMB/H2O2) is added, the reaction is stopped by 1N H2SO4. The intensity of color/ optical density (OD) is measured at 450nm.

Intended Use: Dengue IgM capture ELISA developed by ICMR-NIV is intended for qualitative determination of Dengue virus specific IgM antibodies in serum of patients presenting clinical signs and symptoms consistent with Dengue.

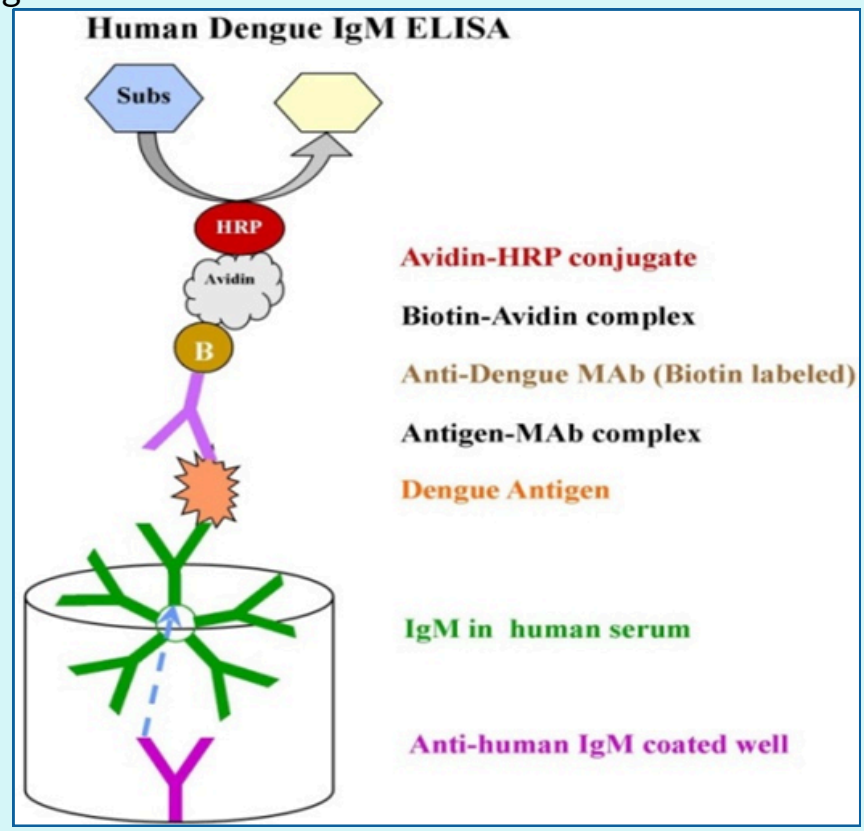
Advantages:

- Indigenous diagnostic test which is being currently used in National Vector Borne Disease control program
- Cost effective as compared to currently available commercial tests

Development Status: Internal validation complete

Institute(s): ICMR-National Institute of Virology (NIV)

Inventor(s): ICMR-National Institute of Virology (NIV) Presenter: Dr. Kanchankumar Patil, Dr. Deepti Parashar)



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