

# CLONING AND APPLICATION OF RECOMBINANT DENGUE VIRUS prM-M PROTEIN FOR SERODIAGNOSIS OF DENGUE VIRUS INFECTION

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**Abstract.** We studied the use of the precursor to the M structural protein (prM) found only on the surface of mature dengue virus as a target protein to detect dengue virus infection. Recombinant D2-16681 prM-M protein was constructed and tested for immunogenicity with dengue and Japanese encephalitis patient sera by Western blot analysis and indirect ELISA. The sensitivity and specificity of indirect ELISA were 48.1 and 85.5%, respectively, and Western blot assay were 23.1 and 98.7%, respectively, for detection of dengue virus. Although the sensitivity of the indirect ELISA is low, the indirect ELISA using recombinant D2-16681 prM-M proteins as antigen may be used for early detection of dengue virus infection.

**Keywords:** dengue virus, prM-M, recombinant protein, ELISA, Western blot

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