



Recombinant Japanese Encephalitis Virus ENV VIRAL ANTIGEN

Catalog Number: PRP-290

Quantity: 100 micrograms, 500 micrograms, 1 milligram **Format:** 20 mM Tris-HCl pH 7.2, 8 M urea, 200 mM NaCl

Host: E. coli

Background:

Previously known as Japanese B encephalitis, Japanese encephalitis (JEV) is a virus from the family Flaviviridae. It is closely related to West Nile virus and St. Louis encephalitis virus. The positive-sense single-stranded RNA genome is packaged in the capsid, enclosed within the protective envelope protein. The genome also encodes several nonstructural proteins (NS1, NS2a, NS2b, NS3, NS4a, NS4b, NS5). NS1 is produced in secretory form, NS3 is a putative helicase, and NS5 is the viral polymerase. It has been noted that Japanese encephalitis virus (JEV) infects the lumen of the endoplasmic reticulum and rapidly produces substantial amounts of viral proteins. Japanese encephalitis is diagnosed by detection of antibodies against the viral components in serum and CSF by IgM capture ELISA.

Specificity and Preparation:

The Japanese encephalitis virus (JEV) envelope protein is expressed in *E. coli* with a 6His tag. The antigen is purified by proprietary chromatographic techniques. It is >90% pure as determined by SDS-PAGE. The antigen is immunoreactive with sera of encephalitis virus-infected individuals.

Usage and Storage:

Reported to be effective as an antigen in ELISA and immunoblotting (western blot).

Protein may be shipped at ambient temperature. Upon arrival, store at -20°C. It is stable for up to five years frozen, one month in solution at room temperature. Gently spin down material before use; 5-10 seconds in a microfuge should be adequate.

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