ADVANCED TARGETING SYSTEMS

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Recombinant West Nile Virus Envelope
VIRAL ANTIGEN

Catalog Number: PRP-451
Quantity: 100 micrograms, 500 micrograms, 1 milligram
Format: 20 mM phosphate buffer, pH 7.5
Host: *E. coli*

Background:
West Nile virus (WNV) is a virus of the family Flaviviridae, genus *Flavivirus*, and part of the Japanese encephalitis (JE) antigenic complex of viruses. Image reconstructions and cryoelectron microscopy reveal a 45 -50 nm virion with a relatively smooth protein surface. WNV is a positive-sense, single strand of RNA from 11 -12 kB long. The RNA codes for 7 non-structural proteins and 3 structural proteins, and is contained within a nucleocapsid formed by 12 kDa protein blocks. The capsid is contained within a host-derived membrane altered by 2 viral glycoproteins.

Specificity and Preparation:
The *E. coli*-derived recombinant protein contains the West Nile virus N-terminus envelope immunodominant regions. The protein is fused with a 6His tag. The molecular weight is ~ 42kDa. It is purified by proprietary chromatographic techniques. The protein is >95% pure as determined by 10% SDS-PAGE. The protein is immunoreactive with sera of West Nile virus-infected individuals.
Amino acid sequence:
MQLKGTTYGVCSKAFKFLGTPADTGHGTVVLELQYTGTDGPCKVPISSVA
SLNDLTPVGRLVTVNPFVSVATANAKVLIELEPPFGDSYIVVGRGEQQINH
HWHKSGSSIGKAFTTTLKGALE.

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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