

**West Nile Virus Envelope^{His}**WNV Envelope
recombinant, *E. coli*

Cat. No.	Amount
PR-1275	100 µg

For general laboratory use.**Shipping:** shipped on gel packs**Storage Conditions:** store at -20 °C**Additional Storage Conditions:** avoid freeze/thaw cycles**Shelf Life:** 12 months**Purity:** > 95 % (SDS-PAGE)**Form:** liquid (Supplied in 20 mM Phosphate buffer pH 7.5)**Applications:**

Antigen in ELISA and Western Blots, excellent antigen for detection of West-Nile virus with minimal specificity problems.

Description:The *E. coli* derived recombinant protein contains the West-Nile N-terminus Envelope Virus immunodominant regions. The protein is fused to 6xHis-tag. Mw 42 kDa.

West Nile virus (WNV) is a virus of the family Flaviviridae part of the Japanese encephalitis (JE) antigenic complex of viruses. Image reconstructions and cryoelectron microscopy reveal a 45-50 nm virion covered with a relatively smooth protein surface. This structure is similar to virus, both belong to the genus flavivirus within the family Flaviviridae. WNV is a positive-sense, single strand of RNA, it is between 11,000 and 12,000 nucleotides long which encode seven non-structural proteins and three structural proteins. The RNA strand is held within a nucleocapsid formed from 12 kDa protein blocks, the capsid is contained within a host-derived membrane altered by two viral glycoproteins.

The protein is purified by proprietary chromatographic technique.

Selected References:Saxena *et al.* (2013) Cloning and expression of an envelope gene of West Nile virus and evaluation of the protein for use in an IgM ELISA. *Diagn Microbiol Infect Dis.* **75**:396.Vogt *et al.* (2011) Poorly neutralizing cross-reactive antibodies against the fusion loop of West Nile virus envelope protein protect in vivo via Fcγ receptor and complement-dependent effector mechanisms. *J Virol.* **85**:11567.Wang *et al.* (2001) West Nile virus envelope protein: role in diagnosis and immunity. *Ann N Y Acad Sci.* **325**:325.