

West Nile Virus Envelope (E) Protein

CATALOG NUMBER: WNV-E-005P

Introduction

West Nile virus (WNV) is a member of the *Flaviviridae* family and part of the Japanese encephalitis (JE) antigenic complex. Cryo-electron microscopy reveals a 45–50 nm virion with a smooth, tightly packed protein surface characteristic of flaviviruses.

WNV contains a positive-sense, single-stranded RNA genome of approximately 11–12 kb encoding three structural proteins—capsid (C), membrane (M/preM), and envelope (E)—and seven non-structural proteins (NS1, NS2A, NS2B, NS3, NS4A, NS4B, NS5). The viral RNA is enclosed within a nucleocapsid composed of ~12 kDa protein subunits and surrounded by a host-derived lipid membrane embedded with viral glycoproteins.

Applications

Western blot standard, antibody ELISA, antigen, etc.

Description

6x his-tagged full-length recombinant envelope protein (aa 291-740) of West-Nile virus (Genbank Accession: AAF18443.1), with molecular weight of 50 kDa.

Source

Escherichia coli

Size

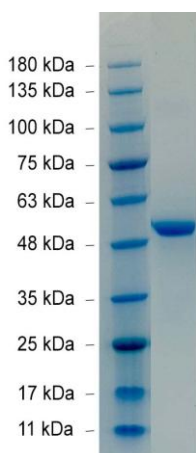
50 µg (1 µg/µL in 1x PBS)

Storage

Store at -20 °C; Stable for 6 months at 4 °C after receipt. Non-hazardous.

Purity

> 95% by SDS-PAGE



SDS-PAGE: E (West Nile Virus) protein (aa 291-740)

Envelope Protein (aa 291-740) of West-Nile Virus:

FNCLGMSNRDFLEGVSGATWVDLVLEGDSCVTIMSKDKPTIDVKMMNMEAANLAEVRSYCYLATVSDLSTKAACPTMGEAHN
DKRADPAFVCRQGVVDRGWNGCGLFGKGSIDTCAKFACSTKAIGRTILKENIKYEVAIFVHGPPTTVESHGNYSTQVGATQA
GRFSITPAAPSYTLKLGEYGEVTVDCPRSGIDTNAYYVMTVGTCTFLVHREWFMDLNLPWSSAGSTVWRNRETLMEFEAPH
ATKQSVIALGSQEGALHQAAGAIPEFSSNTVKLTSGHLKCRVKMEKLQLKGTITYGVCSKAFKFLGTPADTGHGTVVLELQ
YTGTDGPCKVPISSVASLNDLTPVGRLVTNPFVSVATANAKVLIELEPPFGDSYIVVGRGEQQINHHWHKSGSSIGKAFTT
TLKGAQRLAALGDTAWDFGSVGGVFTSVGKAVHQVFGGAFHHHHHH

