



# Rabbit Anti-WNV Envelope Antigen (N-terminus) Polyclonal antibody (DPAB4224)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Product Overview</b>	Polyclonal Antibody to West Nile Virus Envelope Protein (NT).
<b>Target</b>	WNV Envelope Antigen
<b>Immunogen</b>	Rabbit polyclonal WNV Envelope antibody was raised against a synthetic peptide corresponding to 16 amino acids at the N-terminus of the WNV Envelope protein.
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	WNV
<b>Purification</b>	Affinity chromatography purified via peptide column.
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	ELISA
<b>Reconstitution</b>	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tablet
<b>Format</b>	Antibody is supplied in PBS containing 0.02% sodium azide.
<b>Preservative</b>	0.02% Sodium Azide
<b>Storage</b>	Antibody can be stored at 4°C, stable for one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

# BACKGROUND

Introduction	West Nile Virus (WNV) is a member of the Flaviviridae, a plus-stranded virus family that includes St. Louis encephalitis virus, yellow fever virus, and Dengue virus. WNV was initially isolated in 1937 in the West Nile region of Uganda and has become prevalent in Africa, Asia, and Europe. It has rapidly spread across the United States with cases being observed in every continental state. Virus particles consist of a dense core made up of the core/capsid protein encapsulating the RNA genome surrounded by a membrane envelope embedded with envelope and matrix proteins. While the viral core protein is thought to contribute to the WNV-associated inflammation via apoptosis induced through the caspase-9 pathway, the highly glycosylated envelope protein plays a major role for WNV entry into target cells as this entry can be inhibited by using a recombinant domain III from the envelope glycoprotein. The WNV receptor has recently been identified as alpha v beta 3 integrin.
Keywords	Blocking Peptide; Envelope protein; Envelope protein E; Genome polyprotein; Major envelope protein E; West Nile virus; West Nile Virus (E protein) peptide; West Nile Virus (E protein) protein; West Nile Virus M glycoprotein peptide; West Nile Virus preM protein; West Nile Virus Matrix Protein; WNV; WNV Env (NT); WNV Core protein (CT); WNV envelope protein; WNV Envelope protein (CT); WNV Matrix protein (CT); WNVgp1; Caspase-9 (IN1); Group IV; Flaviviridae; Flavivirus.