



## Anti-WNV monoclonal antibody, clone C848M (DMAB4513)

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

### PRODUCT INFORMATION

<b>Specificity</b>	West Nile Virus (WNV) Envelope Protein. When tested by IFA, also reacts with JEV and TBE. Does not crossreact with SLE, YFV, DEN, EEE, WEE, POW, LAC and VEE.
<b>Immunogen</b>	Recombinant E protein
<b>Isotype</b>	IgG2b
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	West nile virus
<b>Clone</b>	C848M
<b>Affinity Constant</b>	Not determined
<b>Purification</b>	90% pure. Protein A chromatography
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	Suitable for use in ELISA and IFA. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded
<b>Format</b>	Purified, Liquid
<b>Concentration</b>	100ug/ml (OD280nm, E0.1% = 1.3)
<b>Size</b>	1 mg
<b>Buffer</b>	0.01M PBS, pH 7.2

**Preservative** 0.1% Sodium Azide

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**Storage** Upon receipt, aliquot and store at -20°C. Avoid multiple freeze/thaw cycles.

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## BACKGROUND

### Introduction

West Nile virus (WNV) is a virus of the family Flaviviridae. Part of the Japanese encephalitis (JE) antigenic complex of viruses, it is found in both tropical and temperate regions. It mainly infects birds, but is known to infect humans, horses, dogs, cats, bats, chipmunks, skunks, squirrels, domestic mammals, rabbits, crows, robins, crocodiles and alligators. The main route of human infection is through the bite of an infected mosquito. Approximately 90% of West Nile Virus infections in humans are without any symptoms. Image reconstructions and cryoelectron microscopy reveal a 45–50nm virion covered with a relatively smooth protein surface. This structure is similar to the dengue fever virus; both belong to the genus Flavivirus within the family Flaviviridae. The genetic material of WNV is a positive-sense, single strand of RNA, which is between 11,000 and 12,000 nucleotides long; these genes 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 viral envelope consists of envelope E and membrane M proteins.

### Keywords

Envelope protein; West Nile Virus Envelope Protein; Flaviviridae; Flavivirus; West Nile virus; Envelope protein; Envelope protein E; Genome polyprotein; Major envelope protein E; WNV envelope protein; WNVgp1

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