



North American Mosquito East (NAM-e)

Multiplex West Nile/Eastern Equine Encephalitis/St Louis Encephalitis

The Vector Smart NAM-e Test is a real-time PCR multiplex test intended to detect West Nile virus (WNV), St. Louis encephalitis virus (SLEV), and eastern equine encephalitis virus (EEEV) through extracted ribonucleic acid (RNA) in mosquito samples.

The test kit has been tested with QIAamp® Viral RNA Mini Extraction Kit (Qiagen), MagMax™ -96 Viral RNA Isolation Kit (Thermo Fisher Scientific), and the sbeadex livestock kit (LGC) and run using the CoDx Box™ Thermal Cycler. Triton™ X-100 (Sigma-Aldrich) is used to inactivate the viruses.

The Vector Smart™ NAM-e test kit has showed no cross-reactivity with Yellow fever (YFV), Zika virus (ZIKV), dengue virus (DENV) types 1-4, chikungunya (CHIKV), Hepatitis C (HCV), Japanese encephalitis (JEV), Spondweni (SPOV), Jamestown Canyon (JCV), La Crosse encephalitis (LACV), and Nhumirim (NHUV) viruses through either wet-test or in-silico analysis.



Vector Smart™ NAM-e

- **Contains a simple and streamlined work flow**
- **Includes internal control to verify sample quality**
- **Includes positive control**
- **Produces results that are easy to interpret**
- **Compatible with multiple platforms & sample extraction techniques**



About Vector Smart™ NAM-e

The NAM-e test kit showed no cross-reactivity with Japanese encephalitis virus (JEV), Yellow fever virus (YFV), Zika virus (ZIKV), dengue virus (DENV) types 1-4, chikungunya (CHIKV), Eastern equine encephalitis (EEEV), Nhumirim virus (NHUV), Jamestown Canyon virus (JCV), La Crosse encephalitis virus (LACV), and Hepatitis C virus (HCV) through wet-test or in-silico analysis.

Product Performance Characteristics

Application	Qualitative Multiplex PCR test, detection for WNV, SLEV and EEEV.		
	WNV†	SLEV†	EEEV†
Limit of detection	3.84x10 ⁴	3.39x10 ³	7.77x10 ²
Sensitivity	96.92%	99.5%	100%
Specificity	100%	100%	100%
Sample type	Mosquitoes		
Detection details	Detection and differentiation of West Nile virus (WNV), St. Louis encephalitis virus (SLEV), and Eastern equine encephalitis virus (EEEV).		
Time to detection	63-90 minutes, depending on the machine used		
Thermal cycler compatibility	Most qPCR systems capable of the following channel compatibilities: FAM CF560 (VIC) CF610 (ROX) Quasar670 (Cy5)		
Extraction kit compatibility	QIAamp® Viral RNA Mini Kit, MagMax™ -96 Viral RNA Isolation Kit, and sbeadex livestock kit.		

† Results based on 1,420 replicates run on the CoDx Box™.

Each North American Mosquito East (NAM-e) test kit includes:

- 1x500µL (100rxns) Vector Smart™ NAM-e Master Mix
- 1x500µL (100rxns) Vector Smart™ NAM-e Positive Control
- 1x500µL (100rxns) Vector Smart™ NAM-e Extraction Control
- 1x500µL (100rxns) Nuclease Free Water

Ordering Information:

Product Name	Product ID
Co-DX Box™ Thermal Cycler	Request Quote
Vector Smart™ NAM-e	NAME-K-001