

### Automated purification of Zika Viral RNA from Biological Liquids.

*Purify Zika Viral RNA from plasma and other biological liquids using the Maxwell® RSC Instrument  
Maxwell® RSC Viral Total Nucleic Acid Purification Kit*

**Kit:** Maxwell® RSC Viral Total Nucleic Acid Purification Kit (Cat.# AS1330)

**Analyses:** RT-qPCR

**Sample Type(s):** Plasma, Blood, Saliva

**Input:** up to 300µl of Sample

**Materials Required:**

- Maxwell® RSC Total Nucleic Acid Purification Kit (Cat.# AS1330)
- Maxwell® RSC Instrument (Cat.# AS4500)
- Heat Block capable of 56°C
- Microcentrifuge tubes

This protocol was developed by Promega Applications Scientists and is intended for research use only.

Users are responsible for determining suitability of the protocol for their application.

For further information, see Technical Manual TM420, available at:

[www.promega.com/protocols](http://www.promega.com/protocols)

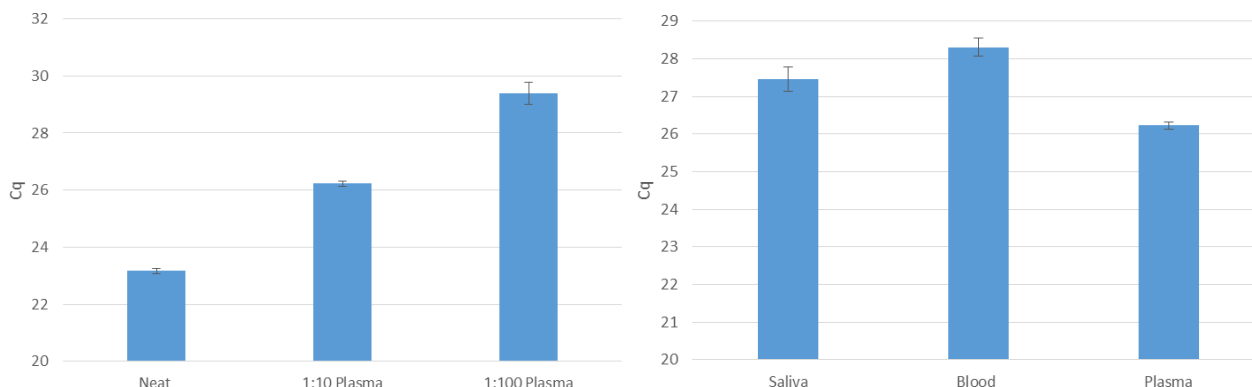
or contact Technical Services at:  
[techserv@promega.com](mailto:techserv@promega.com)

**Protocol:**

1. Add 20µl Proteinase K and 200µl Lysis Buffer to up to 300µl of sample.
2. Vortex for 10 seconds.
3. Incubate samples at 56°C for 10 minutes.
4. Load sample into well #1 of the Maxwell® Cartridge and place a plunger into well #8. Add 50µl of Nuclease-Free Water to the elution tube.
5. Select the RSC Viral TNA method for processing the samples on the Maxwell® RSC Instrument.

## Results:

Performance of Maxwell RSC Total Nucleic Acid Purification Kit (Cat.# AS1330) with Zika Virus.



**Figure 1. Cq values from RT-qPCR for Zika Virus with RNA from Plasma (Left).** Zika Virus obtained from Zeptomatrix was used for testing (Zeptomatrix, Cat.# NATZIKV-ERCM). Zika Virus was spiked into human plasma at a ratio of 1:10 or 1:100 v/v. Viral recovery was tested by amplification with GoTaq® 1-step probe RT-qPCR System (Cat.# A6120) using Zika virus specific primers. n=3 for each condition. **(Right) Cq values from RT-qPCR for Zika Virus with RNA from Plasma, Blood, and Saliva.** Zika Virus obtained from Zeptomatrix was used for testing (Zeptomatrix, Cat. # NATZIKV-ERCM). Zika Virus stock was spiked into whole blood, plasma, or saliva at 1:10 v/v ratio. Viral recovery was tested by amplification with GoTaq® 1-step probe RT-qPCR System (Cat.# A6120) using Zika virus specific primers. n=3 for each condition.