Promega

Product Application

Viral Nucleic Acid Isolation from Saliva on Swabs

To isolate total nucleic acids from viruses in Saliva on swabs using ReliaPrep™ Blood gDNA Miniprep System.

Kit: ReliaPrep™ Blood gDNA Miniprep System

Analyses: qPCR or RT-qPCR

Sample Type(s): Saliva on swabs

Input: One Swab head with up to 200µl liquid

Materials Required:

- Heat Block capable of 56°C

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.

Further information can be found in Technical Manual #TM330, available at: **www.promega.com/protocols** or for further information, please contact **techserv@promega.com**

Protocol:

1. Add 20µl proteinase K to swab sample and vortex.
2. Add 200µl CLD to the sample. Mix by vortexing for at least 10 seconds.
3. Incubate 56°C for 10 minutes.
4. Add 250µl of BBA buffer and vortex to mix.
5. Place swab head and lysate into binding column/collection tube.
6. Centrifuge at max speed for 1 minute. Remove swab head and discard.
7. Add 500µl CWD and centrifuge at max speed for 3 minutes. Discard flow through.
8. Repeat step 7.
9. Place column in a clean Elution Tube. Add 50µl of Nuclease-Free Water to the column,
10. Centrifuge at max speed for 1 minute. Store eluted RNA at -20 or -70°C.

Results: Zika Virus RNA isolation from saliva on swab

Zika from Saliva	
Rep.	Ave Ct
1	28.3
2	28.5
3	28.9
Ave	28.6

Cq values from RT-qPCR for Zika Virus RNA with nucleic acids isolated from saliva spotted on swabs. Zika Virus obtained from Zeptometrix was used for testing (Zeptometrix, Cat. # NATZIKV-ERCM). Zika Virus standard was spiked into saliva on swabs at a ratio of 1:10 v/v. Viral recovery was tested by amplification with GoTaq® 1-step RT-qPCR System (A6020) using Zika virus specific primers. n=3.

