

EchoLUTION Viral RNA/DNA Swab Kits

Short protocol for viral swabs using **BioEcho LyseNtact** Lysis Buffer

! This is not a Silica-based kit! Please, read the instruction manual carefully before starting!

Prepare before starting

- Begin with briefly vortexing upside down the EchoLUTION Spin Columns to be used. Let stand until further use, but at least for 15 minutes.
- Set centrifuge to **1,000 x g**, **swing-out rotor highly recommended!**
We recommend a bucket rotor with adaptors for microtubes.

IMPORTANT NOTE: choose **x g (RCF)**, **NOT RPM** unless stated otherwise

Preparation of BioEcho Spin Column

- Loosen cap of Spin Column $\frac{1}{2}$ turn and **break off** bottom closure
- Place Spin Column in **2 ml** tube
- Centrifuge **1 min** at **1,000 x g**
- Place Spin Column in fresh **1.5 ml** tube



Recovery of viral particles and Lysis

- Add 50 µl** of **LyseNtact Buffer** to a 1,5 ml reaction tube
- Optional:** Add **0-20 µl** of your internal control (IC) to the reaction tube containing the LyseNtact Buffer
- Vortex the tube containing the swab shortly and add 50 µl** of **sample** (swab-rinsing solution containing the viral particles) to the reaction tube containing LyseNtact Buffer and IC:

A) Dry swabs: Rinse swab in PBS or other aqueous buffer of pH **7.2-8.5 (!)** to dissolve the viral particles

NOTE: It is recommended to not use more solution volume than needed; 300-700 µl is usually sufficient; with Amies agar swabs, avoid the carry-over of agar particles

B) Swabs in transport media: add 50 µl of sample (e. g., Copan UTM, eSwab medium) to the reaction tube.

Purification of viral RNA and DNA

- Unscrew Spin Column and transfer **90 µl sample mixture** from the reaction tube **slowly** and **vertically** onto the **middle** of the purification matrix in the Spin Column
- Centrifuge **1 min** at **1,000 x g** with the **cap loosened $\frac{1}{2}$ turn**

Viral RNA/DNA is in the flow-through and ready to use.



NOTE:

- PCR inhibition observed in combination with your PCR system can be eliminated by loading a reduced sample mixture volume to the Spin Column, e. g., 75 µl or 50 µl instead of 90 µl
- Internal Controls (IC) that are added before the purification step should be ≥ 500 nt in length



Product use limitation

This kit is for research use only. It is not registered or authorized to be used for diagnosis, prevention or treatment of a disease.