INSTRUCTIONS QUICK MANUAL

Isolation of viral RNA using
viRNAtrap™ collecting and transport medium

| PRODUCT DESCRIPTION

The viRNAtrap is a collecting and transport medium which immediately inactivate the specimen and stabilizes RNA at room temperature for at least three days. The viRNAtrap transport medium has been tested and used successfully with a variety of synthetic and cotton tipped swabs. The viRNAtrap transport medium is directly compatible with standard manual and automated RNA isolation protocols, which minimizes sample handling, limits the possibility of infection during the pre-analytical phase and shortens assay time.

Total RNA can be isolated directly from the viRNAtrap transport medium using optimized protocol employing GAMMAG magnetic beads. The RNA isolation can be performed either manually or in a high through-put automated procedure using a liquid handling robot station.

Isolated RNA can be directly used in subsequent single-tube RT-qPCR testing with results obtained within 2 hour.

Isolated RNA is compatible with other RNA analytical methods like RNA sequencing, RT-PCR, transcription profiling, hybridization, NGS etc.

| SPECIFICATIONS

- Sample Inactivation – viRNAtrap immediately inhibits RNase activity and inactivates viruses and other infectious agents.
- Binding capacity 10 µg RNA
- Elution Volume - ≥50 µl Elution Buffer

| PRODUCT COMPONENTS AND STORAGE CONDITIONS

30 ml viRNAtrap Lysis Buffer with magnetic beads
12 ml Wash Buffer 1 (concentrated)
3 ml Wash Buffer 2 (concentrated)
15 ml Elution Buffer

Store all components at room temperature (22–25°C). No refrigeration is required.
See expiration date on product label.

| SAFETY PRECAUTION

Some reagents included with this kit are irritants. Wear protective gloves and eye protection. Follow the safety guidelines and rules enacted by your facility.

| RECOMMENDED CHEMICALS AND EQUIPMENT

- 100 % isopropanol p.a. (85 ml for 100 isolations)
- 1,5 ml tubes for lysis and elution step
- Liquid handler (10–1000 µl)
- Filtered tips
- Magnetic stand
- safety protection equipment
- centrifuge for 1.5ml eppendorf tubes

| REAGENT PREPARATION

- Add 18 mL of isopropanol to the Wash Buffer 1 concentrate (12 ml) for total volume 30 ml.
- Add 27 mL of isopropanol to the Wash Buffer 2 concentrate. (3 ml) for total volume 30 ml.

Solutions are stable for at least one year.

| PROTOCOL

1. Transfer 100 ul of viRNAtrap transport medium with biological sample to clean 1,5 ml tube.
2. Add 300 µl of viRNAtrap Lysis Buffer with magnetic beads.
   Important: viRNAtrap with beads settle quickly, ensure that beads are kept in suspension while dispensing.
3. Add 400 µl volume of isopropanol and mix well.
4. Incubate for 3 minutes.
5. Transfer the plate or tube (not provided) to the magnetic stand until beads have pelleted (2 min).
6. Aspirate and discard the supernatant.
7. Add 250 µl of Wash Buffer 1, do not remove from magnetic stand.
8. Wait 20s then aspirate and discard the supernatant.
9. Add 250 µl of Wash Buffer 2, do not remove from magnetic stand, wait 20s then aspirate and discard the supernatant.
10. Centrifuge shortly, place on magnetic stand and remove all supernatant.
11. Dry the beads at room temperature for 2 minutes or until fully dry.
12. Remove samples from magnetic stand. Add 50 ul of DNase/RNAse free water and miwx well for 2 minutes.
13. Wait for 2 minutes. Thane place on magnetic snad and wait until beads hae palleted (2 min).
14. Eluted RNA place into a new eppendrof tube/ellution plate.

The eluted RNA can be used immediately or stored frozen at -80°C.

| AUTOMATION SCRIPTS

The viRNAtrap isolation protocol is compatible with most of liquid handling robot stations. For automation scripts and related technical support please contact the manufacturer.

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Version: 1.1_A
Date of last revision: 27.8.2020