

## FILTRATION: VIRUS RETENTION



1. Sterilize each filter holder of the manifold with flame and alcohol. Let them cool down a few minutes before placing the membranes on top.



2. With previously sterilized tweezers and wearing gloves, place the membranes on the filter holders. The direction of the membranes does not matter.

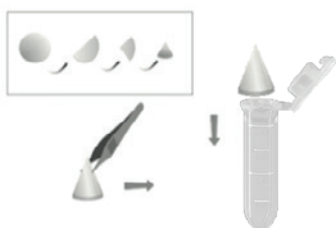


3. Place the sterile funnels (plastic or stainless steel) on the filter holders, above the membranes. The filters should not be fold. Fill the funnels with the water samples.



4. Open the valves and turn on the vacuum pump to start filtration of the samples. Avoid drying the membranes for too long.

## ELUTION: VIRUS RECOVERY



5. When filtration is over, close all the valves and remove the funnels. Fold the membranes as shown above and place each of them in a microtube containing TGBE buffer. The tip of the cone should point upwards.



6. Place the microtubes in the thermomixer and elute the viruses by strong stirring (> 1 500 RPM) for 10 minutes. Then, remove the membranes from the tubes. The samples are ready to be analysed by culture or molecular biology (after extraction and purification).

## EQUIPEMENT & REAGENTS REQUIRED

- Filtering manifold and vacuum pump (ex : 1.2 m3/h - 1.5 mbar),
- Sterile funnel and tweezers,
- Microtube 2 ml,
- Thermomixer,
- TGBE buffer (Tris Glycine Beef Extract).

## SPECIFICATIONS

- Membrane disc 47 mm,
- Porosity lower than 0.45 µm,
- Minimal pressure loss,
- Compatible with norm ISO/TS 15216-2.