

COLLECTION STANDARD OPERATING PROCEDURE

VIRUSES

I. Sample collection

- Onboard: Take the 10 L bottle of seawater that remains after the serial filtrations (Sampling SOP_omics size fractionation)
- Add 1 mL of FeCl₂ (stored at room temperature)
- Shake gently the bottle to mix
- Incubate for >3 hours at RT in the shade to allow adhesion of the viral particles to the Fe salt granules
- In the lab: Pour the seawater of the bottle into a clean 10L bottle with a tap
- Connect the bottle to a filtration rig 142 mm and to a vacuum pump (Millipore EZ-Stream)
- Dispose a 0.8 µm pore size filter (Millipore Isopore ATTP14520)
- Filter all 10 L through the 0.8 µm filter
- Remove the filter using alcohol-sterilized tweezers
- Fold the filter into 4 parts directly on the filter holder of the tripod
- Put the filter in a 50 mL Falcon tube
- Add 2-3 mL of seawater to keep the filter hydrated
- Wrap the Falcon tube with aluminum foil
- Store at 4°C
- Clean the tripod and the pump with distilled water and the tank with diluted acid and then distilled water.

II. List of material, equipment and supplies

- 10 L plastic bottle (out-tank) filled with 0.22 µm filtered seawater, collected at the end of the fractionated filtration for omics see **Sampling SOP_omic size fractionation**
- FeCl₂ aqueous solution
- Millipore 142 mm filter holder
- Millipore - Isopore membrane filters (ATTP14250) 142 mm diameter 0.8 µm pore size
- Vacuum pump (Millipore EZ-Stream)
- 50 mL Falcon tubes
- Aluminum foil
- Tweezers
- Ethanol
- Lab gloves