

# Step 1: Protocol for the filtration of urine samples

## Urodiag® Urine Filter Kit (OncoDiag)

50 Filters

Ref. No. UR50F



## Protocol

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The urine samples are collected from the first miction in the morning into a clean sterile container. After collection, urines must be rapidly stored at 4°C (no more than 2 h at room temperature) and treated within 72 h. The filtration of urine is carried out with a single-use filter. Filters can be stored at room temperature (15-25°C) for up to 12 months.

### Equipment and Reagents to Be Supplied by User:

- Urine sample (~100 ml)
- Syringe 50 ml luer-lock (Terumo) (VWR\_613-5398)
- Phosphate-buffered saline (PBS 1X), without Mg & Ca (stored at 4°C) (Dutscher\_702594)
- Waste bottle containing bleach

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1. Remove the plunger from the syringe and connect the **Filter** to the syringe.
  2. Introduce the first 50 ml of urine sample, then reinsert the piston into the syringe.
  3. Apply gentle pressure on the syringe piston to ensure the filtration of the urine sample. The filtrate is collected in a waste container containing bleach.
  4. Disconnect the **Filter** and repeat steps 1 to 3 to filter the remaining volume of the urine sample.
  5. Repeat step 1, introduce 5 ml of PBS 1X, reinsert the piston into the syringe and apply gentle pressure on the syringe piston. The filtrate is collected in the waste bottle containing bleach.

**Note: Alternative protocol using the QIAvac 24 Plus (Qiagen).** Ensure that the main vacuum valve is closed (protocol in QIAvac 24 Plus Handbook). Switch on the vacuum pump by pressing the power switch. Adjust the needle of the vacuum approximately at **-300 mbar**. Insert the VacConnector into the luer slot, then the **Filter/syringe (without the piston) or Device**, on the QIAvac 24 Plus. Introduce the first 50 ml of the urine sample into the Device. Open the main vacuum valve and ensure that the needle is stabilized near **-300 mbar**. After all of urine sample (~100 ml) has been filtered, switch off the vacuum pump. Remove the Device from the vacuum manifold, and discard the VacConnector.

6. Disconnect the **Filter** from the Device.

The **Filter** is ready for DNA extraction procedure or can be stored at -20°C for later use.