Head Office: Building #C1, 880 JiangYangNan Road, Shanghai,China. 200439
Factory: Building #20, 888 Zhujiang Road, Rudong, Jiangshu,China.226400
Toll Free: 400-688-2055 Tel/ +86-21-68030217 http://www.toroivd.com

TOROIVD® Collection&Extraction Kit

【Catalogue Number】 MAG-024

【Packing Information】 24×1 bags/kit

【Storage】 Stored at at room temperature for 2 years.

【Description】

TOROIVD® Collection&Extraction Kit is a POCT brick specially designed for "Dropper PCR", aiming to meet the needs of complex samples and scenarios requiring extremely high sensitivity. This kit can be used with just magnetic rods, making it suitable for on-site nucleic acid extraction by non-professionals, without any additional equipment. No pipettes or tips are needed, greatly minimizing the risk of cross-contamination during the pipetting process.

【Components】

Each bag contains the following components：

Lysis Buffer	1tube	Tube with beads and indicator line
Wash Buffer A	1tube	Bottle with light blue solution
Wash Buffer B	1tube	Bottle with light clear solution
Elution Buffer	1tube	Small dropper bottle
Magnetic Rod Sleeve	1pcs	Black Sleeve
Sampling Bag	1pcs	Sampling and Pretreatment

This kit also includes a tool set: 1 **Strong Magnetic Rod**, **1 White Steel Rod,** and 1 **Needle Sleeve**.

Material required but provided in this kit:

Hot water (50-80°C); disposable cups; TOROIVD® Sampling Buffer （TOROIVD，TPA-1620-1L）Boiled Water;Gloves; Mask;

【Pollution avoidance】

The number of Collection&Extraction bags is taken according to the number of samples, and TOROIVD® Sampling Buffer is divided in advance according to the required amount before use. Do not return used reagents to reagent store. The pretreatment and extraction is recommended to be carried out in an outdoor ventilated area to prevent cross-contamination .

【Sample Preparation】

Pretreatment should be operated in ventilation, keep away from the reagents preparation. Please check the potential contamination in aerosol regularly.

A: Combined swabs from multi-sites: Collect the sample with the combined swabs from multi-site of live animals using a TOROIVD® Self-Collection Kit (TPA-1620 or TPA-1611). When the sample contains humic acid or heme that affects the lighting and inhibits amplification failure, this reagent is used to extract and retesting. After incubating in hot water for 5 minutes, the sampling tube is shaken, and the supernatant is dropped into the Lysis Buffer tube for extraction to the indicator line

B. Direct extraction from sample in body fluid：

Collect the sample, such as whole blood, serum, urine, semen, hydrothorax, etc. Shake the sample thoroughly and stand for 5 mins. The supernatant is

dropped into the Lysis Buffer tube for extraction to the indicator line.

C. Treat sample in sampling bag：

Tissue: Take 50-100 mg tissue or organ sample (size of a seed) and 2 times sampling buffer in a sampling bag. **Swabs:** Collect the saliva, cloaca, environment, oral and nasal secretions sample with a swab, transfer it into a sampling bag with 2 times sampling buffer.**Feed powder:** Take some feed powder and 5 times sampling buffer in size into a sampling bag. **Gauze and other sampling tools:** Take the gauze and the sampling buffer into one sampling bag, make sure the gauze is immersed with sampling buffer.

Smash the sample in the sampling bag, incubate the bag in boiled water for 5 min, then smash it again. After standing for 5 mins. The supernatant is dropped into the Lysis Buffer tube for extraction to the indicator line.

【Protocol】

1. The supernatant is dropped into the **Lysis Buffer** tube to the indicator line. Cover the lid, and shake it up and down quickly for 2 minutes to fully lyse the sample. Add a **Strong Magnetic Rod** into the **Magnetic Rod Sleeve**，and slowly insert it into the **Lysis Buffer** tube to fully adsorb the magnetic beads to the **Magnetic Rod Sleeve**.

2. Transfer the **Magnetic Rod Sleeve** to the **Washing Buffer A,** remove the **Strong Magnetic Rod** with a **White Steel Rod**, and pump the **Magnetic Rod Sleeve** up and down for 10 seconds to let the magnetic beads completely disperse into the light blue solution. Add the **Strong Magnetic Rod** into the **Magnetic Rod Sleeve** and insert the **Needle Sleeve**, and slowly insert it into the **Washing Buffer A,**, so that the magnetic beads are fully adsorbed on the

Magnetic Rod Sleeve.

3. Transfer the **Magnetic Rod Sleeve** to the **Washing Buffer B**, remove the the **Needle Sleeve** and remove **t**he **Strong Magnetic Rod** with a **White Steel Rod**, and pump the **Magnetic Rod Sleeve** up and down for 10 seconds to let the magnetic beads completely disperse into the clear solution. Add the **Strong Magnetic Rod** into the **Magnetic Rod Sleeve** and insert the **Needle Sleeve**,, and slowly insert it into the **Washing Buffer B** to fully adsorb the magnetic beads to the **Magnetic Rod Sleeve**.

4. Take out the **Magnetic Rod Sleeve** and dry it in a ventilated place for 3 minutes.**This step is very important!**

5. Transfer the magnetic beads to the **Elution Buffer** tube, remove the **Needle Sleeve** and remove the **Strong Magnetic Rod** with **a white steel rod**, and pump the **Magnetic Rod Sleeve** up and down for 10 seconds to completely disperse the magnetic beads into the eluent. Add **Strong Magnetic Rod** into the **Magnetic Rod Sleeve** and slowly insert the **Elution Buffer tube** so that the magnetic beads are fully adsorbed to the **Magnetic Rod Sleeve**.

6. Discard the magnetic beads and the **Magnetic Rod Sleeve**. Cover the **small dropper bottle** cap, and the remaining clear solution in the **small dropper bottle** is the purified nucleic acid template.

【Notes】

In the dropper PCR protocol from TOROIVD, the purified nucleic acid template in the small dropper bottle can replace the Self- Collection tube.