# MOG **Nucleic Acid Extraction**

## **Molecular Products**

## **Magnetic Bead Extraction**

CATALOG #: MOL-EXTRACT-MAG

VMRD offers a magnetic bead-based DNA/RNA extraction kit designed for manual and automated purification of pathogen nucleic acids in all veterinary specimens.

## **Excellent performance** in evaluated samples

- MAP in feces
- BVD in semen, ear notches, serum and blood
- PRRSV in serum, and oral fluids
- SVA in vesicular swabs
- PEDV in oral fluids, feces and fecal swabs
- Leptospira in kidney and urine
- EHDV in spleen

#### Blood Oral fluids

Serum Milk

Plasma Urine

> Nasal swabs Semen

**Tissues** Fecal swabs

Vesicular swabs **Feces** 



## The only extraction kit you will ever need

- Outstanding performance in all sample types
- Impervious to inhibitors and extenders
- 21 min automated protocol
- Elution volume 50-100 µL
- Extracts both DNA and RNA
- Suitable for automation and manual processing

## **Flexibility** and Reliability

This nucleic acid extraction kit is tough enough to eliminate inhibitors and extenders, yet gentle to nucleic acids. Use one kit to purify RNA/DNA from viruses or DNA from bacteria. With two lysis **solutions** this nucleic acid extraction kit offers flexibility and reliability for all your extraction needs.

## **Procedure overview**

### 1. Lyse Sample

Sample lysis occurs in the presence of chaotropic ions and Proteinase K.



#### 2. Bind Nucleic Acids

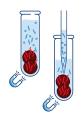
Add Binding Working Mix to Lysate.

Mix/Shake then **Incubate** to allow adsorption of nucleic acids to paramagnetic beads.



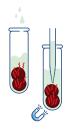
#### 3. Separate Beads

Apply magnetic field to collect/isolate magnetic beads for each subsequent step.



#### 4. Wash & Dry

Perform clean-up of nucleic acids bound to paramagnetic beads with Wash buffer 1, Wash buffer 2 and 80% Ethanol.



#### 5. Elute Nucleic Acids

Add 50-100 µL low-salt elution buffer. **Incubate**. Separate beads a final time. Collect elution liquid.





## Validation data

Nucleic acids were extracted from fecal, serum and vesicular swab samples as well as artificially spiked semen samples with egg-based extenders using VMRD and other top-of-the line commercial kits from two manufacturers. The output was analyzed using standardized PCR assays.

