

## MACHEREY-NAGEL

# RNA and DNA isolation from clinical samples



- One kit for any common clinical sample type
- High sensitivity even for low viral titers
- Magnetic bead based viral RNA/DNA and bacterial DNA isolation





#### NucleoMag<sup>®</sup> Pathogen

#### Meeting the requirements of the molecular diagnostic market

The NucleoMag<sup>®</sup> Pathogen kit allows rapid manual and automated small scale purification of viral RNA/DNA and microbial DNA using magnetic bead technology. The kit \* is designed for processing of common clinical sample material, such as whole blood, serum or plasma, feces, tissue, or swabs. After sample specific pretreatment, liquid or homogenized sample is used in the purification procedure. The NucleoMag<sup>®</sup> Pathogen kit already contains carrier RNA, proteinase K and all buffers are delivered ready to use.

#### Product at a glance

Technology	Magnetic beads
Format	Highly reactive superparamagnetic beads
Processing	Manual or automated
Samplematerial	The prep is fully scalable. A convenient volume, e.g., for 96-well processing would be: < 200 µL whole blood, serum, plasma, < 30 mg tissue, < 200 µL stool, < 200 µL swab wash solution
Max. amount of starting material in purification procedure	200 µL liquid / homogenized sample
Fragmentsize	300 bp–approx. 50 kbp
Elution volume	50–100 µL

 $^{\star}$  Kits to be used for research purposes only

#### Application data



#### Sensitivity screening for Hepatitis B virus (HBV) and Hepatitis C virus (HCV)

Dilution (1:10) series of human plasma (200 µL, with original virus titer as shown) were extracted in triplicate with the NucleoMag<sup>®</sup> Pathogen kit and tested with RealStar<sup>®</sup> HBV PCR Kit 1.0 and the HCV RT-PCR Kit 1.0 (altona diagnostics). The NucleoMag<sup>®</sup> Pathogen kit demonstrates a sufficient sensitivity for Hepatitis B virus (HBV) and Hepatitis C virus (HCV) detection in human plasma sample material. The internal control was extracted and recovered as expected. PCR inhibitors were not detected.

"The NucleoMag® Pathogen kit meets all expectations and requirements of a nucleic acid extraction system for the molecular diagnostic market."

Dr. Carsten Tiemann, LABCON-OWL GmbH (certified laboratory)



#### Sensitivity screening for pathogen detection in human feces samples

Dilution series of  $10^{-3}$ – $10^{-4}$  of feces samples for sensitivity screening was conducted using three (3) replicates. Extraction was performed with the NucleoMag<sup>®</sup> Pathogen kit and the competitor kit "R". PCR analysis was performed using the RIDA<sup>®</sup> GENE Viral Stool Panel I (R-Biopharm) and RealStar<sup>®</sup> Clostridium difficile PCR Kit 1.0 (altona diagnostics).

# Product Preps REF NucleoMag® Pathogen 1 x 96/4 x 96 744210.1/4

Trademarks: NucleoMag is a registered Trademark of MACHEREY-NAGEL GmbH & Co. KG. RealStar is a registered Trademark of Altona Diagnostics. RIDA is a registered Trademark of R-Biopharm.

#### Order from:

D-MARK Biosciences, orders@d-markbio.com , Ph: 1-800-784-7485; (416) 297-8220, Fx: 416-297-7459

### MACHEREY-NAGEL

