

INTRODUCTION

Besides being manufacturer of *in vitro* diagnostic devices, apDia is also the official distributor of R-Biopharm products (ELISA, rapid tests and PCR kits) in Belgium. This newsletter is an introduction to a number of these products.

CLOSTRIDIUM DIFFICILE GDH

NEW !

Today *Clostridium difficile* is considered to be one of the most important hospital pathogens¹. Soon a screening test will be available for *Clostridium difficile*, that targets the glutamate dehydrogenase (GDH) of the bacterium. GDH is present in relatively high copy numbers which makes it a particularly well-suited target antigen.

The new **RIDA®SCREEN *Clostridium difficile* GDH ELISA** offers the advantage of exceptionally high sensitivity, while its high specificity ensures a reliable detection of the pathogen. Although it does not eliminate the need for the detection of toxin A and B, which is obligatory for the diagnosis of *C. difficile* infection, the GDH ELISA improves reliability of detection of this very consequential nosocomial pathogen when performed in combination with the **RIDA®SCREEN *Clostridium difficile* Toxin A/B ELISA**.

Because the new **RIDA®SCREEN *Clostridium difficile* GDH ELISA** uses the same stool sample diluent as the **RIDA®SCREEN *Clostridium difficile* Toxin A/B ELISA**, both assays can be run in parallel or sequentially using a single sample dilution. Since both the GDH and the A and B toxins remain stable when stored at 2-8°C in the sample diluent, any necessary repetitions can also be performed using the same sample dilution.

CLOSTRIDIUM DIFFICILE TOXIN A/B

In *Clostridium difficile* associated diarrhea (CDAD) toxins A and B are key determinants of the severity of the disease¹. Detection of these toxins is obligatory for diagnosis and adequate treatment management of a *C. difficile* infection. The clinical picture of the disease depends mainly on whether the patient is a carrier of non-toxigenic *C. difficile* strains or an asymptomatic carrier of toxigenic (toxins A and B) *C. difficile* strains.



<http://biology-pictures.blogspot.be/2011/11/clostridium-difficile.html>

Following products are available:

RIDA®SCREEN *Clostridium difficile* Toxin A/B (ELISA)

RIDA®QUICK *Clostridium difficile* Toxin A/B (rapid test)

RIDA®GENE *Clostridium difficile* & Toxin (real-time PCR)

RIDA®GENE CD Toxin A/B (real-time PCR)

RIDA®GENE *Clostridium difficile* HyperTox (real-time PCR)

CAMPYLOBACTER

Campylobacteriosis has become one of the world's most common food-borne diarrheal diseases in humans. In symptomatic infections typical symptoms are diarrhea, cramps and abdominal pain. This contagious disease is caused by bacteria of the genus *Campylobacter*².



<http://www.campylobacter.be/>

The **RIDA®QUICK *Campylobacter*** rapid test allows the specific qualitative detection of *Campylobacter* antigen (*C. jejuni* and *C. coli*) in stool samples, even in cases where the bacteria are no longer cultivable. The negative predictive value of this rapid test is 99,8%. Whereas the standard culture of bacteria takes several days, this test requires only 15 min allowing to start treatment much sooner.

RIDA®GENE STOOL PANELS

The causes of hospital acquired or nosocomial diarrhea may be infectious or non-infectious and affect up to 1/3 of hospitalized patients. The most common infective cause of hospital acquired diarrhea is *Clostridium difficile*. Other predominant infectious causes are *norovirus* and *rotavirus*. The **RIDA®GENE Hospital Stool Panel** is a multiplex real-time PCR for the rapid and specific detection and differentiation of *norovirus* (genogroups I and II), *rotavirus* and *C. difficile* toxin genes A (tcdA) and B (tcdB) in human fecal samples.

apDia also offers a real-time multiplex PCR kit, **RIDA®GENE Bacterial Stool Panel**, for direct detection and differentiation of *Salmonella spp.*, *Campylobacter spp.* and *Yersinia enterocolitica* in human stool samples.

All **RIDA®GENE stool panels** can be run on commonly used PCR instruments. The PCR kits, which contain all necessary components, allow the user to process up to 100 tests in less than 2 hours. The analytical sensitivity is 5 DNA copies per reaction per pathogen.

REFERENCES

1. Kufelnicka AM, Kim TJ. Effective utilization of evolving methods for laboratory diagnosis of *Clostridium difficile* infection. *Clin. Infect. Dis.* (2011) **45**: 992-998.
2. Kist M, Bereswill S. *Campylobacter jejuni*. In: Mühldorfer I, Schäfer KP (eds) *Emerging bacterial pathogens*. *Contrib. Microbiol.* Vol 8. Karger, Basel, 150-165.

On the backside of this newsletter you can find a reply form to request more detailed information about the products mentioned above.

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apDia is the official distributor of R-Biopharm products in Belgium!

I wish to receive additional information about following topics:

- CLOSTRIDIUM DIFFICILE GDH
- CLOSTRIDIUM DIFFICILE TOXIN A/B
- CAMPYLOBACTER
- RIDA®GENE STOOL PANELS
- I ALREADY USE R-BIOPHARM PRODUCTS. HOW CAN I ORDER R-BIOPHARM PRODUCTS THROUGH apDia?
- OTHER:

Sales representative Belgium: Laurent Nijs

Sales representative The Netherlands: James Kessels

Please, send us this reply form by fax using the number +32 (0)14 81 29 45, by e-mail to admin@apdia.be or by regular mail to apDia nv, Hertoginstraat 82, B-2300 Turnhout, Belgium.