Parasite diagnostics
Rapid and reliable detection by real-time PCR

- RIDA®GENE Parasitic Stool Panel I
- RIDA®GENE Parasitic Stool Panel II
- RIDA®GENE Dientamoeba fragilis
Parasitic gastroenteritis – sensitive and specific detection of major protozoans by molecular diagnostics

RIDA®GENE assays are intended for use as an aid in diagnosis of gastrointestinal infection caused by parasites. *Giardia lamblia*, *Cryptosporidium* spp., *Entamoeba histolytica* and *Dientamoeba fragilis* are the most important diarrhea-causing protozoa.

*Giardia lamblia* (synonym *G. intestinalis* or *G. duodenales*) is one of the most important causes of diarrhea. Infections occur in 2% of all adults and 6 - 8% of all children in developed countries and about a third of all people in developing countries are infected with this protozoan.¹ The CDC (Center for Disease Control) estimates about 77,000 cases of giardiasis each year in the U.S.²

*Cryptosporidium parvum* is one of several species of the genus *Cryptosporidium*. Besides *C. parvum*, also *C. hominis* most commonly causes cryptosporidiosis in humans.³ However, also infections by other *Cryptosporidium* spp. such as *C. felis*, *C. meleagridis*, *C. canis*, and *C. muris* may lead to clinical symptoms. Each year estimated 748,000 cases of cryptosporidiosis occur in the US.³⁴

*Entamoeba histolytica* is the only human pathogenic species of the genus *Entamoeba* and the causative agent of amoebiasis. In 10% of *Entamoeba histolytica* cases the infection leads to amoebic colitis and on rare occasions to extraintestinal amoebiasis, mostly to the liver (amebic liver abscess). The WHO estimates that about 50 million people worldwide suffer from amoebiasis each year, resulting in 100,000 deaths each year.⁵

*Dientamoeba fragilis* is distributed worldwide, however it is also one of the most underestimated diarrhea-causing protozoa. Recent studies demonstrated the pathogenic potential and implicated it as a common cause of gastrointestinal disease. The prevalence of *Dientamoeba fragilis* varies from 0.3% to 52% and often exceeds that of *Giardia lamblia*.⁶
RIDA®GENE Parasitic Stool Panel I Art. No. PG1715

- Multiplex real-time PCR
- Detection of Giardia lamblia, Entamoeba histolytica, Cryptosporidium spp. and Dientamoeba fragilis

RIDA®GENE Parasitic Stool Panel II Art. No. PG1725

- Multiplex real-time PCR
- Detection of Giardia lamblia, Entamoeba histolytica and Cryptosporidium spp.

RIDA®GENE Dientamoeba fragilis Art. No. PG1745

- Multiplex real-time PCR
- Specific detection of Dientamoeba fragilis

RIDA®GENE real-time PCR for parasitic gastrointestinal infections – detection overview

<table>
<thead>
<tr>
<th>Detection</th>
<th>RIDA®GENE Parasitic Stool Panel I</th>
<th>RIDA®GENE Parasitic Stool Panel II</th>
<th>RIDA®GENE Dientamoeba fragilis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dientamoeba fragilis</td>
<td>Giardia lamblia</td>
<td>Giardia lamblia</td>
<td>Dientamoeba fragilis</td>
</tr>
<tr>
<td>Giardia lamblia</td>
<td>Entamoeba histolytica</td>
<td>Entamoeba histolytica</td>
<td>Cryptosporidium spp.</td>
</tr>
<tr>
<td>Entamoeba histolytica</td>
<td>Cryptosporidium spp.</td>
<td>Cryptosporidium spp.</td>
<td></td>
</tr>
</tbody>
</table>

Thermal profile
- DNA profile and universal profile

Time to result
- ~ 60 - 90 min*

Controls
- Positive control
- Negative control
- Internal control DNA

* Dependent on the instrument used.

Ordering information

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Tests</th>
<th>Matrix</th>
<th>Art. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RIDA®GENE Parasitic Stool Panel I</td>
<td>Multiplex real-time PCR for the direct qualitative detection of Giardia lamblia, Entamoeba histolytica, Cryptosporidium spp. and Dientamoeba fragilis in human stool samples</td>
<td>100</td>
<td>Stool</td>
<td>PG1715</td>
</tr>
<tr>
<td>RIDA®GENE Parasitic Stool Panel II</td>
<td>Multiplex real-time PCR for the direct qualitative detection of Giardia lamblia, Entamoeba histolytica and Cryptosporidium spp. in human stool samples</td>
<td>100</td>
<td>Stool</td>
<td>PG1725</td>
</tr>
<tr>
<td>RIDA®GENE Dientamoeba fragilis</td>
<td>Multiplex real-time PCR for the direct qualitative detection of Dientamoeba fragilis in human stool samples</td>
<td>100</td>
<td>Stool</td>
<td>PG1745</td>
</tr>
</tbody>
</table>