VIASURE

Dientamoeba fragilis Real Time PCR Detection Kit

Pathogen and product description

nitially classify as an amoeba, *Dientamoeba* fragilis is actually a protozoan parasite that belongs to the *Trichonomad* order. It has been associated with gastrointestinal disease worldwide showing symptoms as diarrhea, loose stools and abdominal pain with a highly variable incidence, ranging from 1.1 to 20%. Its transmission mode remains unclear, and both faecal-oral route and vector transmission have been suggested.

Despite the frequency of *D. fragilis* presence, it is still neglected as a significant pathogen due to the lack of a routinely diagnostic in many laboratories. Detection of *D. fragilis* trophozoites on the permanent stained smear is the current standard. Trophozoites range from 5 to 15 μ m in length, 9 to 12 μ m in

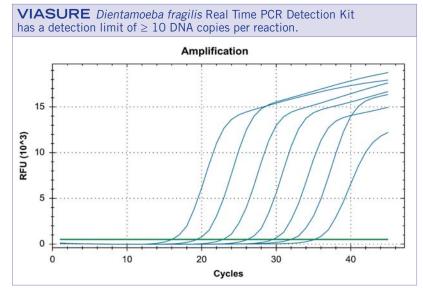
width, and contain 1 to 2 characteristically fragmented nuclei. Diagnosis is often only possible by experienced technologists, leading to many potentially missed infections. Recently, PCR-based diagnostic methods have been developed for diagnosis of *D. fragilis*, showing at least a three-fold sensitivity increase compared to permanent stained smears.

VIASURE Dientamoeba fragilis Real Time PCR Detection Kit is designed for the diagnosis of Dientamoeba fragilis in human stool samples. After DNA isolation, the identification of Dientamoeba fragilis is performed by the amplification of a conserved region of the 5.8S rRNA gene using specific primers and a fluorescent-labeled probe.





Analytical sensitivity



Dilution series of Dientamoeba fragilis (10^7 - 10^1 copies/rxn) template run on the Bio-Rad CFX96 TouchTM Real-Time PCR Detection System.

Components

Reagent/Material	Description	Quantity
Dientamoeba fragilis 8-well strips	A mix of enzymes, primers-probes, buffer, dNTPs, stabilizers and Internal control in stabilized format	6/12 x 8-well strip
Rehydration Buffer	Solution to reconstitute the stabilized product	1 vial x 1,8 mL
Dientamoeba fragilis Positive Control	Non-infectious synthetic lyophilized cDNA	1 vial
Negative Control	Non template control	1 vial x 1 mL
Water RNAse/DNAse free	Water RNAse/DNAse free	1 vial x 1 mL
Tear-off 8-cap strips	Optical caps for sealing Wells during thermal cycling	6/12 x 8-cap strip

Kit References

Reference	Description
VS-DIE106L	Viasure Dientamoeba fragilis Real Time PCR Detection Kit 6 x 8-well strips, low profile
VS-DIE106H	Viasure Dientamoeba fragilis Real Time PCR Detection Kit 6 x 8-well strips, high profile
VS-DIE112L	Viasure Dientamoeba fragilis Real Time PCR Detection Kit 12 x 8-well strips, low profile
VS-DIE112H	Viasure Dientamoeba fragilis Real Time PCR Detection Kit 12 x 8-well strips, high profile
VS-DIE113L	Viasure Dientamoeba fragilis Real Time PCR Detection Kit 96-well plate, low profile
VS-DIE113H	Viasure Dientamoeba fragilis Real Time PCR Detection Kit 96-well plate, high profile

Work Flow

One-step rehydration of wells and add your extracted DNA



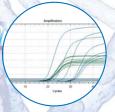
STEP 1
Add 15 µl of rehydration buffer into each well



STEP 2
Add 5 µl of DNA sample /
positive control /
negative control



STEP 3
Load the strips into the thermocycler and run the specified protocol



STEP 4
Interpretate results



CSQ MED ISO 13485