

RUO



## Fungiplex® Mucorales

Real-Time PCR

## **Fungiplex Mucorales**

Fungiplex Mucorales is a real-time PCR test, which detects the mucormycetes responsible for mucormycosis. It provides rapid results with high sensitivity and specificity without isolation of the organism.

## **Using PCR to target Mucorales**

Mucormycosis is a serious fungal infection of rising incidence. Caused by a group of molds, mucormycetes, of the order Mucorales, it usually affects immunocompromised patients, those with uncontrolled diabetes mellitis or skin trauma. Conventional diagnostics, such as tissue biopsy and fungal culture can be invasive, are often slow and insensitive. Meanwhile, fungal biomarkers such as galactomannan and beta-D-glucan are not appropriate for the detection of these fungi. Delays in treatment are associated with a significant increase in mortality. For that reason, there is interest in the investigation of culture-independent biomarkers for the early diagnosis of mucormycosis. Mucorales PCR for the early detection of mucormycetes has shown promise when testing BAL, serum and blood for both anticipating diagnosis, and as a prognostic indicator.<sup>1</sup>

The Fungiplex Mucorales assay is designed as a research tool to rapidly detect the presence of Mucorales DNA extracted directly from samples, without culture.

<sup>1</sup> L. Millon et al. J. Fungi (2019) 5, 24 doi:10.3390/jof5010024

Target	Limit of detection	Thermocyclers (validated)	Time to result
Rhizopus spp. Lichtheimia spp. Cunninghamella spp. Rhizomucor spp. Mucor spp. Actinomucor spp. Apophysomyces spp. Saksenaea spp. Syncephalastrum spp.	30-100 input copies (DNA)	√ ABI 7500     √ ABI Quantstudio 5     √ Bio-Rad CFX     √ Hain FluoroCycler XT     √ Qiagen RotorGene     √ Roche LightCycler 480 II	< 2 h from extraction (1 - 50 samples)

## **Fungiplex Mucorales**

- Has been designed in a **user-friendly** format that is compatible with **existing laboratory equipment** and produces results from extracted nucleic acid in **less than 2 hours**.
- Offers the potential to rapidly detect Mucorales without isolation of the organism.

Order Information: Part-No. 1871051 Fungiplex Mucorales RUO PCR Kit

Real-time PCR Kit for the detection of mucormycetes from extracted DNA. The kit provides all necessary reagents for 50 tests.

Fungiplex is a registered trademark of the Bruker group of companies.

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As of May 2021, Bruker Daltonik GmbH is now Bruker Daltonics GmbH & Co. KG.

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