

## Clinical implications

Opportunistic infections caused by *Aspergillus* species are responsible for frequent therapy complications in an increasing number of immuno-compromised patients (involves especially patients after hematopoietic cell or solid organ transplantation, patients with hematological malignancies or other diseases related to the malfunction of the immune system). This type of infection is mostly manifested as invasive aspergillosis (IA). Early diagnosis and efficient antimycotic treatment is most important for the patient's survival. The infection usually attacks the respiratory system and that is why IA mostly affects lungs (or less frequently paranasal sinuses and CNS (brain)). In the case of dissemination process, almost every organ

(gastrointestinal tract, heart, kidneys) may be affected. Most cases of IA (approximately 80 %) are caused by the species *Aspergillus fumigatus*, other clinically important species are *A. flavus*, *A. niger*, *A. terreus*, other *Aspergillus* species occur rarely.

## Principle of detection

The purpose of the kit is the detection and quantification of the pathogenic DNA of the most commonly occurring species of *Aspergillus* - *Aspergillus fumigatus*, *Aspergillus flavus*, *Aspergillus niger* and *Aspergillus terreus* by **real-time PCR method**.



## Available products

Cat. No.	Product	Number of tests
3222-025	gb MICRO Aspergillus	25

1 kit contains 4 assays for 25 PCR reactions (20 µl volume of each reaction).

## Parameters of the diagnostic kit

- *in vitro* diagnostics
- CE IVD marked
- ready-to-use assays
- LOD 0.19-9.10 copies/µl
- internal positive control, standards and negative control included
- fungal DNA detection in FAM channel

## Content of the diagnostic kit

* Component	Conc.	Purpose
○ Assay PCR Preamplification	1.25×	Preamplification assay
● Assay qPCR IPC Check	1.25×	Control assay
● Assay qPCR AFUM	1.25×	Specific assay
● Assay qPCR AFLA	1.25×	Specific assay
● Assay qPCR ANIG	1.25×	Specific assay
● Assay qPCR ATER	1.25×	Specific assay
● Standard 7 ASPERGILLUS	10 <sup>7</sup> cop/µl	Positive Control
● Standard 5 ASPERGILLUS	10 <sup>5</sup> cop/µl	Positive Control
● Standard 3 ASPERGILLUS	10 <sup>3</sup> cop/µl	Positive Control
● Deionized Water		Negative Control

\* Lid colour



## Validated for cyclers

- Rotor-Gene 3000/6000/Q (Corbett Research, Qiagen)
- CFX96/CFX96 Touch (Bio-Rad)
- ABI 7900HT (Applied Biosystems)
- AriaMx (Agilent Technologies)
- Mic (Bio Molecular Systems)