



AsperGenius®: a multiplex Real Time PCR assay for the detection of *Aspergillus fumigatus* and identification of azole resistance markers.

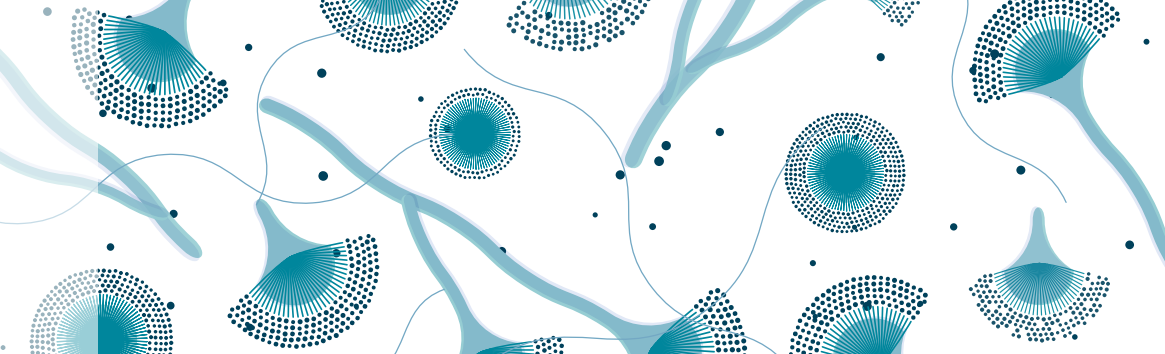
Overview

AsperGenius® is a multiplex real-time PCR assay developed by PathoNostics. It rapidly diagnoses *Aspergillus* infections

and simultaneously identifies azole resistance. Within 2,5 hours, detection and characterization is accomplished in lower respiratory tract samples of *Aspergillus* infected patients. AsperGenius® allows for timely, targeted antifungal treatment resulting in reduced toxic side effects and improved treatment outcome in these patients.

The AsperGenius® multiplex PCR assay is suitable for real-time PCR instruments using melting curve analysis and has been validated on LightCycler 480 (Roche), Rotor-Gene 6000 (Corbett) and Rotor-Gene Q (Qiagen).





Products

AsperGenius® Species multiplex

(PN-001) – 50 reactions

- Detection and differentiation of *Aspergillus* species

AsperGenius® Resistance multiplex

(PN-002) – 50 reactions

- Detection and differentiation of *Aspergillus* species
- Identification of 4 azole resistance markers in *Aspergillus fumigatus*

Targets

Species multiplex

- *Aspergillus fumigatus*
- *Aspergillus terreus*
- *Aspergillus* species
- Internal Amplification Control (IAC)

Resistance multiplex

- L98H
- Tandem repeat 34
- T289A
- Y121F

Diagnostic specimens

- Bronchoalveolar lavage (BAL) samples from hematology patients
- Bronchoalveolar lavage (BAL) samples from intensive care unit patients

Quality

- Validated on fungal cultures
- Validated on clinical samples (BAL)
- CE-IVD marked

Features and benefits

- Direct detection on clinical samples
- Identification of the most prevalent triazole resistance mutations
- Diagnosis within 2,5 hours after nucleic acid extraction
- Internal Amplification Control (IAC) included
- Positive controls included
- Interpretation software available

DermaGenius®: Multiplex real-time PCR assays for the detection and identification of fungal infections of nail, hair and skin

Overview

DermaGenius® multiplex real-time PCR assays identify the most prevalent fungal infections in nail, hair and skin samples

within 2,5 hours. A semi-automated DNA-extraction is recommended in the procedure to ensure efficiency with limited hands-on time. The procedure from sample to diagnosis can be implemented by a routine molecular diagnostic laboratory and is suitable for high-throughput screening.

DermaGenius® assays are separately available as Nail and Complete multiplex products.

The DermaGenius® multiplex PCR assays are suitable for real-time PCR instruments using melting curve analysis and have been validated on LightCycler 480 II (Roche) and Rotor-Gene Q (Qiagen).





Products

DermaGenius® Nail multiplex kit

(PN-003) – 50 reactions

- Detection and differentiation of *C.albicans* and *Trichophyton* species

DermaGenius® Complete multiplex kit

(PN-004) – 50 reactions

- Detection and differentiation of *C.albicans* and *Trichophyton* species
- Detection and differentiation of *Microsporium* species and *E.floccosum*

Targets

Nail multiplex kit

- *Candida albicans*
- *Trichophyton mentagrophytes*
- *Trichophyton interdigitale*
- *Trichophyton rubrum*

Complete multiplex kit

- *Candida albicans*
- *Trichophyton mentagrophytes*
- *Trichophyton interdigitale*
- *Trichophyton rubrum*
- *Trichophyton tonsurans*

- *Trichophyton soudanense*
- *Trichophyton violaceum*
- *Microsporium canis*
- *Microsporium audouinii*
- *Epidermophyton floccosum*

Diagnostic specimens

- Nail, hair and skin samples

Quality

- Validated on fungal cultures
- Validated on clinical nail, hair and skin samples
- **CE**-IVD marked

Features and benefits

- Identification of the most clinically prevalent fungal infections directly in nail, hair and skin samples
- Diagnosis within 2,5 hours after nucleic acid extraction
- Nucleic acid extraction procedure recommended
- Internal Control (IC) included
- Positive controls included

PneumoGenius®: a multiplex real-time PCR assay for the detection of *Pneumocystis jirovecii* and DHPS mutations.

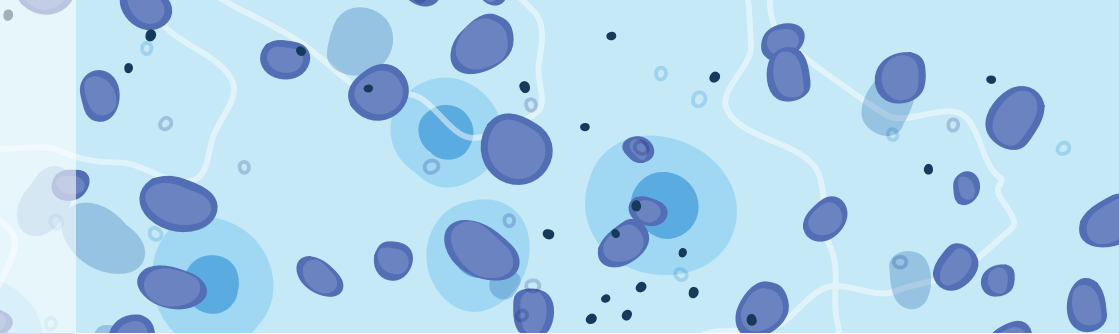
Overview

PneumoGenius® is a multiplex real-time PCR assay that detects *Pneumocystis jirovecii* in respiratory tract samples within 2.5 hours. *Pneumocystis jirovecii* is a common cause of life-threatening pneumonia

in immunocompromised patients. Fast diagnosis and the initiation of appropriate therapy may lead to improved outcome and survival. The PneumoGenius® assay also determines the presence of 2 mutations that are associated with failure of treatment using sulfa-drugs. These mutations are located on codons 55 and 57 of the multi-domain FAS gene, encoding the enzyme dihydropyrimidine synthase (DHPS).

The PneumoGenius® multiplex PCR assay is suitable for real-time PCR instruments using melting curve analysis, and has been validated on LightCycler 480 (Roche) and Rotor-Gene Q (Qiagen).





Product

PneumoGenius® multiplex kit
(PN-600) – 25 reactions

- Detection of *Pneumocystis jirovecii*
- Identification of mutations in DHPS

Quality

- Validated on clinical samples (BAL)
- Validated on PCP EQA programmes (QCMD)
- **CE**-IVD marked

Targets

- *Pneumocystis jirovecii* mtLSU
- *Pneumocystis jirovecii* DHPS domain of the FAS gene (codons 55 and 57)
- Internal Control

Features and benefits

- Direct detection in BAL samples
- Identification of two prevalent point mutations in the DHPS domain of the FAS gene
- Diagnosis within 2.5 hours after nucleic acid extraction
- Internal Control included
- Positive Control included

Diagnostic specimens

- Bronchoalveolar lavage (BAL) samples