

Product Application

Automated purification of Aspergillus DNA from blood samples

Aspergillus DNA was purified from blood samples using Maxwell® RSC Instrument

Kit: Maxwell® RSC Blood DNA kit (Cat.# AS1400)

Analyses: qPCR

Sample Type(s): human whole blood

Input: 300μl

Materials Required:

Maxwell® RSC Instrument (Cat.# AS4500)

Maxwell® RSC Blood DNA Kit (Cat.# AS1400)

Lyticase

Thermoblock

This protocol was developed by Promega Applications Scientists and is intended for research use only.

Users are responsible for determining suitability of the protocol for their application.

For further information, see Technical Manual TM419, available at: www.promega.com/protocols

or contact Technical Services at: techserv@promega.com

Protocol:

- 1. Add 300 μ l of blood and 12.5 μ l of lyticase (4 U/ μ l) in a 1.5ml tube.
- 2. Incubate at 30°C and 1000rpm for 60 minutes.
- 3. Add 30µl of Proteinase K Solution to incubation tube.
- 4. Add 300μl of Lysis Buffer to incubation tube.
- 5. Vortex for 10 seconds.
- 6. Incubate at 56°C, 1000rpm for 20 minutes. Transfer each blood lysate sample from the incubation tube to well #1 of each cartridge. (Well #1 is the well closest to the printed side and furthest from the elution tube.)
- 7. Place a plunger in well #8 of each cartridge. Well #8 is the well closest to the elution tube.
- 8. Place an empty elution tube into the elution tube position for each cartridge. Add 50μl of Elution Buffer to the bottom of each elution tube.
- 9. Run the protocol RSC Blood DNA method on the Maxwell® RSC Instrument.



Product Application

Results:

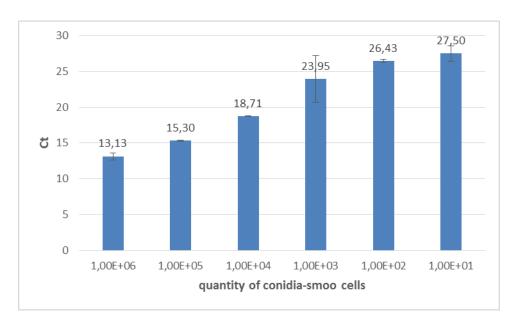


Figure 1. Aspergillus **DNA** detection in blood samples. Amplification of DNA extracted from 10⁶ down to 10 conidia-smoo cells of Aspergillus niger spiked in blood samples using GoTaq® qPCR Master Mix (Cat.# A6001) and 28Sr specific Aspergillus primers¹. N=3. No amplification was observed in the non-template control.

Reference:

1. E. C. M. Williamson et al.(2000) PCR Diagnosis of Invasive Aspergillosis in BMT Recipients British Journal of Haematology, , 108, 132-139.