

DermaTyping

From suspicion to certainty

Comprehensive **dermatophyte detection** in a single, streamlined PCR assay



Versatile

Nails, Skin, Hair



Real time PCR

Easy interpretation



Complete

Positive, negative and internal controls



Effective extraction

Fast and reliable



Clinical Context & Diagnostic

• Dermatophytes are common filamentous fungi that cause superficial mycoses by invading the keratin of the **nails, hair and skin of humans and animals**. Dermatophytes cause a wide range of infections affecting the scalp, skin, groin, feet, hands, beard, and nails, and are classified as anthropophilic, zoophilic, or geophilic based on their habitat.¹

• Most infections are caused by Trichophyton, Microsporum, Nannizzia, and Epidermophyton, with *T. rubrum* as the leading pathogen, followed by *T. interdigitale/mentagrophytes*, *T. tonsurans*, and *M. canis*.^{2,3}

• Diagnosis traditionally relies on microscopy and culture, but slow growth and contamination can delay species identification. **Real-time PCR enables rapid** and accurate detection of the most common dermatophytes directly from nail, hair, and skin samples, supporting timely and targeted treatment.⁴



Features⁵

Test Principle	Qualitative, real-time multiplex PCR for the detection of 9 different dermatophyte species
Sample Type	Nails, Skin, Hair
Pathogens Identified	<i>M. canis</i> , <i>T. tonsurans</i> , <i>T. violaceum</i> , <i>M. audouinii</i> , <i>T. indotineae</i> , <i>T. benhamiae</i> , <i>N. gypsea</i> , <i>T. verrucosum</i> , <i>E. floccosum</i>
Extraction	DermaXtract - EBE-077 (Eurobio Scientific), Qiacube (Qiagen)
Thermocyclers	CFX96/Opus (Bio-Rad), LC480 II (Roche), QuantStudio 5/7 (Thermo), Mic qPCR (BMS)

Performances⁵

	M.canis	T. tonsurans	T. violaceum	M. audouinii	T. indotineae	T. benhamiae	N.gypsea	T. verrucosum	E. floccosum
Clinical sensitivity	>99%	>99%	>99%	>99%	>99%	>99%	>99%	>99%	>99%
Clinical specificity*	>99%	>99%	>99%	91,1	99,1	98,0	99,1	99,0	>99%
Analytical sensitivity**	0,91	1,08	1,00	2,33	7,23	2,04	2,15	2,66	2,02

*95% confidence interval

** 95% cut-off in copies/µl on QuantStudio 7 (ThermoFischer)

Reference	Designation	Packaging
EBX-074	EurobioPlex DermaTyping	25 / 50 / 100 tests

Other EurobioPlex References		
EBE-077	EurobioPlex DermaXtract	200 tests
EBX-073	EurobioPlex DermaScreen	100 / 200 / 600 tests

1: Weitzman I. and Summerbell R.C.; «The dermatophytes», ClinMicrobiol Rev. 1995 April;240-59. doi: 10.1128/CMR.8.2.240

2: Kruijthoff and All ; «Dermatophyte Infections Worldwide: Increase in Incidence and Associated Antifungal Resistance»; Life,2023 Dec 19;14 doi: 10.3390/life14010001

3: Gräser and All; "Diagnostic PCR of dermatophytes - an overview", JDDG,2012.10:721-725

4: Sarah E. Kidd and Gerhard F. Wiedhagen (2022) «Diagnosis of dermatophytes: from microscopy to direct PCR», Microbiology Australia 43(1), 9-13. doi:10.1071/MA22005;

5: For more information, please refer to the technical sheet