

عنوان مقاله:

Molecular identification of *Trichophyton rubrum* Fungalysin gene of isolated from clinical sources by Multiplex PCR method

محل انتشار:

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نویسندگان:

Maryam Goudarzi - Faculty of Biological Sciences, Islamic Azad University, Tehran North Branch, Tehran, Iran

Mohaddeseh Larypoor - Dep. Microbiology, Faculty of Biological science, Islamic Azad University, Tehran north Branch, Tehran, Iran

kiomars Amini - Department of Microbiology, Faculty of Biological Sciences, Islamic Azad University, Saveh Branch, Saveh, Iran

خلاصه مقاله:

Trichophyton rubrum is one of the most important causes of Dermatophytosis. The Fungalysin gene is an important factor in the incidence of dermatophytosis disease. The aim of this study was to investigate the presence of mep γ and mep β -generating Fungalysin genes using the multiplex PCR method. 150 scabs and nails were sampled from patients with symptoms of dermatophytosis. Samples containing *Trichophyton rubrum* were identified and isolated using a red pigment production test in DTM medium, without urea production, without hair piercing and sorbitol adsorption. Culture slide was performed to identify the microscopic structure. Then DNA extraction was performed and several PCR experiments were performed in these strains using specific primers of Fungalysin gene. Out of 150 samples isolated from patients, 30 *Trichophyton* strains were isolated based on morphological, biochemical and microbial tests. Among these, 20 strains had mep β gene and 1 strain had mep γ gene. Results shows that the frequency of mep β genes is higher than mep γ and this abundance is involved in causing more pathogenicity of *Trichophyton rubrum* and is one of the major causes of treatment-resistant infections in medical centers. Now, with the help of the Multiplex PCR method, it is possible to detect the presence of pathogenic genes in the shortest time with high characteristics and sensitivity, and with appropriate and timely treatment, prevented the function of treatment resistance strains, recurrence of the disease and prolongation of the treatment period.

کلمات کلیدی:

Trichophyton rubrum, Dermatophytosis, Fungalysin, mep β , mep γ

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