

## عنوان مقاله:

Investigation of fimH Single Nucleotide Polymorphisms (C640T and T591A) in Uropathogenic E. coli Isolated from Patients with Urinary Tract Infections

## محل انتشار:

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## نویسندگان:

Razieh Molaie - *Cell and Molecular Research Center, Shahrekord University of Medical Sciences, Shahrekord, Iran*

Fariba Dehghanian - *Division of Genetics, Biology Department, Faculty of Sciences, University of Isfahan, Isfahan, Iran*

Zohreh Hojati - *Division of Genetics, Biology Department, Faculty of Sciences, University of Isfahan, Isfahan, Iran*

Abolfazl Gholipour - *Department of Microbiology and Immunology, Cellular and Molecular Research Center, Faculty of Medicine, Shahrekord University of Medical Sciences, Shahrekord, Iran*

## خلاصه مقاله:

Background: Urinary tract infections are one of the most frequent health problems and Uropathogenic Escherichia coli is the major pathogen resulting UTIs. The severity of UTIs is caused by the expression of a large range of virulence factors. In this study, we evaluated the allelic frequency fimH gene, in UPECs isolated from patients with UTIs. This study also aimed to determine the roles of C640T and T591A SNPs of the fimH gene in the ability of UPEC to cause UTIs. Material and Methods: A total of 140 UPEC strains isolated from patients with UTIs were screened by PCR-RFLP for determining the prevalence of the C640T and T591A SNPs of fimH gene in UPEC strains isolated from patients referred to educational hospitals of Shahrekord. The genotyping of C640T and T591A SNPs was performed using BmeI1390I and BseNI restriction enzymes, respectively through PCR-RFLP method. Results: There were no meaningful association between C640T and T591A SNPs of fimH gene and the ability of UPEC fimH variants to cause UTIs in the studied E. coli isolates. Conclusion: FimH is one of the most major virulence factors among UPECs which is confirmed in most E. coli isolates. Further studies are required to determine the association between different fimH gene SNPs of isolated UPECs from UTIs patients and the ability of UPEC fimH variants to cause UTIs.

## کلمات کلیدی:

UTIs, fimH, C640T and T591A SNPs, PCR-RFLP

## لینک ثابت مقاله در پایگاه سیویلیکا:

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