

عنوان مقاله:

MT1XT02 Single Quasi-Monomorphic Mononucleotide Marker for Detection of Microsatellite Instability in Iranian HNPCC patients

محل انتشار:

کنفرانس بین المللی علوم و مهندسی (سال: 1394)

تعداد صفحات اصل مقاله: 7

نویسندگان:

Najmeh Farahani - *Department of Genetics and Molecular Biology, School of Medicine, Isfahan University of Medical Sciences, Isfahan, Iran*

Parvaneh Nikpour - *Department of Genetics and Molecular Biology, School of Medicine, Isfahan University of Medical Sciences, Isfahan, Iran*

Mohammad Hassan Emami - *Clinic of Gastrointestinal Diseases, Poursina Hakim Research Center, Isfahan University of Medical Sciences, Isfahan, Iran*

Morteza Hashemzadeh - *Cellular and Molecular Research Center, Shahrekord University of Medical Sciences, Shahrekord, Iran*

خلاصه مقاله:

Background and Aims. Colorectal malignancies with high microsatellite instability (MSI-H), either hereditary or sporadic, demonstrate better prognosis, altered response to 5FU chemotherapy and altered operative approach. It is now recommended to perform MSI testing for all new cases of colorectal cancer regardless of being categorized as hereditary or sporadic. This study aimed to evaluate MT1XT22 mononucleotide marker in Iranian HNPCC patients. The samples were further characterized using Promega five- marker MSI testing panel and Immunohistochemical (IHC) technique. **Methods.** MT1XT22 mononucleotide marker and commercially available MSI testing kit (Promega, USA) incorporating five quasi-monomorphic markers was studied in 22 HNPCC cases using polymerase chain reaction (PCR) technique. IHC also was performed to evaluate the status of all four important mismatch repair (MMR) proteins. **Results.** Eight (24%), seven (354) and five (254) cases detected to be MSI positive using Promega kit, IHC and MT1XT22 respectively. Among the markers included in Promega kit, BAT22 marker with instability in all 8 samples was the most instable marker (1224). NR2% and NR21 markers showed instability in 7 cases (87.54%), BAT25 And MONO 27 markers were instable in 2 (754) and 5 (22.54) specimens respectively. **Conclusion.** Although MT1XT22 is reported to be a valid single marker for MSI testing in CRC patients, it seems this is not hold true in Iranian patients. Instead BAT22 among the markers included in Promega MSI testing kit was shown instability in all 8 MSI-H CRC samples. Therefore, it seems BAT22 could act well as a single marker for MSI testing in Iranian CRC patients

کلمات کلیدی:

HNPCC, MSI, IHC, MT1XT22, Quasi-monomorphic Repeats

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/424613>

