

## STUDY OF SEQUENCE HOMOLOGY BETWEEN MMR

### GENE OF *E. COLI* AND HUMAN GRNOME

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#### ABSTRACT

*This case control study aimed to clarify the possible role of DNA mismatch repair genes MutS, MutH, MutL in commensally Escherichia coli in human colon associated with colorectal cancer through evident presence of sequence homology with human mismatch repair genes HMLh<sub>1</sub>, Msh<sub>1</sub>, Msh<sub>2</sub>, Pms<sub>1</sub>, Pms<sub>2</sub>. Whole blood and biopsy samples were collected from (75) patients with colorectal cancer, and (75) other healthy person as control cases. In addition to (75) swab from colon to isolate and study the commensally E. coli form. All samples were collected from Hilla Babel province during Jan (2014) to Feb (2015). The genotyping was carried out by using PCR technique. Through studied the sequence homology between these genes showed that presence the similarity or sequence homology between muts and mutl genes of E. coli with msh<sub>2</sub> and hmlh<sub>1</sub> genes in human.*

**KEYWORDS:** MMR, Colorectal Cancer, Sequence Homology

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