

## Introduction of an Antibiotic and Antitumoral Drug Replace for Ethidium Bromide in DNA Staining in Agarose Gel Electrophoreses

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**Background & Objectives:** Ethidium bromide, a chemical substance with fluorescence property and incorporate to DNA, is used in DNA identification in agarose gel electrophoresis. Since this material is very oncogenic and has a great usage in molecular research, very little deal but the persistent bring contamination of air, work utensil and surfaces. Unfortunately, decontamination is not performed due to indifference or difficulty. On the other hand contamination of all utensil is not palpable and its ill effect has outbreaked in long time. The material which is introduced is an antibiotic and anti tumoric drug. This material is used in patients with bladder and breast cancer. The aim of this study is the introduce of this material for ethidium bromide in DNA staining in agarose gel electrophoresis.

**Methods:** In this study from different concentrations of MMC for DNA staining in agarose gel electrophoresis were used and the results were surveyed with results yield from DNA staining with use of Ethidium bromide.

**Results:** In this study it was showed that the use of MMC for Ethidium bromide can obtain the same result.

**Conclusion:** We suggest that MMC with fluorescence property is a safe dye and can be replaced for Ethidium bromide.

**Keywords:** Ethidium Bromide; MMC (Mitomycin C); Agarose Gel Electrophoresis

