

عنوان مقاله:

miR-214 expression change in HCT116 cancer cell line following the exposure to static magnetic fields

محل انتشار:

فصلنامه ژنتیک و ژنومیک انسانی، دوره 6، شماره 2 (سال: 1401)

تعداد صفحات اصل مقاله: 5

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خلاصه مقاله:

The Research on the effects of magnetic fields on the expression of miRNAs is helpful to understand better the mechanism of electromagnetic fields' function in the development and progression of cancer. This research investigates the effect of static magnetic fields with 1, 2, and 3 mT intensities on miR-214 expression change in the HCT-116 cell line. We used MTT assay to measure cell viability. In order to measure the expression changes of miR-214, real-time PCR was used. The results showed that the cell survival rate and expression of miR-214 had decreased significantly under the influence of magnetic fields in an intensity-dependent manner. Concerning the role of miRs in regulating signaling pathways involved in cancer promotion and progression, and their effectiveness under exposure to low-frequency magnetic fields, investigating and understanding the effects of different magnetic fields on the expression of miRs can be of great importance in preventing and controlling cancer.

کلمات کلیدی:

Gene Expression, miR-214, Static magnetic fields, Expression change

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<https://civilica.com/doc/2059529>

