

## عنوان مقاله:

The effect of deuterium depleted water and 5- fluorouracil compound on superoxide dismutase activity in on SKBR-3 breast cancer cells

## محل انتشار:

چهارمین کنفرانس بین المللی پژوهش در علوم و مهندسی (سال: 1398)

تعداد صفحات اصل مقاله: 7

## نویسندگان:

Niloofer Boroumand - *Department of Biotechnology, Faculty of Advanced Sciences and Technologies, University of Isfahan, Isfahan, Iran*

Mandana Behbahani - *Department of Biotechnology, Faculty of Advanced Sciences and Technologies, University of Isfahan, Isfahan, Iran*

## خلاصه مقاله:

Breast cancer is one of the most common malignant diseases and the second cause of death among women in the world, and according to statistics, one in every 12 people suffers from breast cancer. Recently, deuterium-depleted water (DDW) therapy has been increasing. Also, studies have shown that 5-Fluorouracil (5-FU) has an anti-cancer effect. Thus, the purpose of the current study was to investigate the effect of DDW and 5-FU on the superoxide dismutase (SOD) enzyme activity in the SKBR-3 cell line. The activity of SOD enzymes influenced by DDW and 5-FU in different concentrations on the SKBR-3 cell line was investigated by the colorimetric method. Statistical analyses were performed with one-way analysis of variance (ANOVA) followed by t-Test. Also, breast cancer signaling pathway enrichment analysis performed on the Kyoto Encyclopedia of Genes and Genomes (KEGG) database. The result of this study showed that in cells treated with the different concentrations of DDW and 5-FU lead to the increase SOD enzyme activity of the cells.

## کلمات کلیدی:

Breast cancer, DDW, 5-FU, SOD

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/936378>

