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Different Cell Culture Mediums Show Various Effects on CD8 + T Cells Expansion: A Bioinformatics Study

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Abstract

Expansion of T cells, especially CD8 + cells, is very important for cell therapy approached in diseases related to the immune system. Finding signaling pathways and molecules involved in improving the quality and quantity of T cells can be a great help in compensating the lost lymphocytes in the body. In this study, with the use of bioinformatics analysis and the use of enrichment databases, gene expression profiles were investigated using microarray analysis. The results of this study were the joint selection of 26 upregulated genes and 59 downregulated genes that were involved in SREBP control of lipid synthesis, co-stimulatory signal during T-cell activation mitosis and chromosome dynamics, telomeres, telomerase, and cellular aging signal pathways. Using bioinformatics analyzes, integrated and regular genes were selected as common genes CD80, LST1, ATM and ITM2B in 4-1BBL , Akt inhibitor, interleukin 7 and 15 expansion media..

Biography

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Publication of speakers

1. Arsalan Jalili et al ; Arsalan Jalili et al ; Autophagy regulation and its role in normal and malignant hematopoiesis,2019 June 3
2. Arsalan Jalili et al ; The role of cardiac exosomes in myocardial repair at the glance,2020,June 3
3. Arsalan Jalili et al ; Signaling pathways involved in chronic myeloid leukemia pathogenesis: The importance of targeting Musashi2-Numb signaling to eradicate leukemia stem cells,2019 June 22
4. Plasma exchange followed by convalescent plasma transfusion in COVID-19 patients,2021 April 20

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