Original Paper

Effect of Chrysin on AGS human gastric cancer cell line

Amini Sarteshnizi N (B.Sc)[1], Teimori H (Ph.D)*[2], Zahri S (Ph.D)[3]
Mobini Dehkordi M (Ph.D)[4], Khosravi S (Ph.D)[5], Amini Sarteshnizi R (M.Sc)[6]

[1]M.Sc Student in Cellular and Molecular Biology, Department of Biology, University of Mohaghegh Ardabili, Ardabil, Iran. [2]Assistant Professor, Cellular and Molecular Research Center, Shahrekord University of Medical Sciences, Shahrekord, Iran. [3]Associate Professor, Department of Biology, University of Mohaghegh Ardabili, Ardabil, Iran. [4]Assistant Professor, Department of Genetic, University of Shahrekord, Shahrekork, Iran. [5]Assistant Professor, Cellular and Molecular Research Center, Shahrekord University of Medical Sciences, Shahrekork, Iran. [6]M.Sc in Food Science and Technology, Department of Food Science and Technology, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

Abstract

Background and Objective: Chrysin is a natural and active biological component which is extracted from plants, honey and propolis. Chrysin has anti-inflammatory, anticancer and antioxidant propertis. This study was done to evaluate the effect of chrysin on AGS human gastric cancer cell line.

Methods: In this descriptive - analytic study, chrysin was dissolved in dimethyl sulfoxide (DMSO) and the cytotoxic effects of concentrations of 10, 15, 20, 30, 40 ,50, 60, 70, 80, and 100 µM/ml of chrysin on AGS cells was evaluated. Viability of the cells was determined with MTT assay after 24, 48 and 72 hours and compared to controls.

Results: Chrysin inhibited the growth and proliferation of human gastric cancer AGS cell line. The antiproliferative effect of chrysin was dose and time dependent. The IC50 values were determined for 60, 30 and 20 µM, in incubation time of 24, 48 and 72 hour, respectively ($P<0.05$).

Conclusion: Chrysin proved to have antiproliferative activity on human gastric cancer cells in culture medium.

Keywords: AGS human gastric cancer cell line, Chrysin, MTT assay, Cell viability

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*** Corresponding Author: Teimori H (Ph.D), E-mail: hteimori@skums.ac.ir**

Received 8 Feb 2014 **Revised** 8 Mar 2014 **Accepted** 9 Mar 2014

This paper should be cited as: Amini Sarteshnizi N, Teimori H, Zahri S, Mobini Dehkordi M, Khosravi S, Amini Sarteshnizi R. [Effect of Chrysin on AGS human gastric cancer cell line]. J Gorgan Uni Med Sci. 2015; 16(4): 63-68. [Article in Persian]