



REF

AMN3

Dianthus

(AMN3)

:

(REF)

48

AMN3

/

1000

%66.7

/

%

REF AMN3

EVALUATION OF EFFECT OF EUGENOL PLANT ON TWO OF CANCEROUS CELLULAR LINES (AMN₃) AND NORMAL (REF)

Amina N.Al-Thwani, Sanar S. Nseaf

Institute of Genetic engineering and Biotechnology for post-graduate studies,
University of Baghdad. Baghdad- Iraq.

Abstract

The capacity of aqueous and alcoholic extract of *Dianthus* was studied on two cell lines, which were: many adino carcinoma (AMN3) and normal cell line of Rat embryo fibroblast (REF) in vitro and the effect was evaluated of these extracts

It was found that the crude extract of Dinthus contained resins, saponins, flavonoides, comarins and phenols. Aqueous and alcoholic extract of *Dianthus* showed a high inhibition activity on cancer cell lines in all concentrations used and the effects of *Dianthus* appeared after 48 hours. From being exposed on the cell in concentration of 1000 mg/ml.

The highest inhibition result in AMN3 cells were 58.3, 66.7% for both extracts aqueous and alcoholic and the inhibition effects were similar in both cell line and the bio results of these cells explained the inhibition effects for the biology of cells depend on the concentration of crude extract and type of solvent being used.

.[6] (°)

: [7]

°

.[]

:

[]

.[]

(:) :

.[]

°

-

(Dianthus)

.[]

AMN3 ()

.[]

-

.[5] %

.[]

RPMI1640 media

(3-2)

-

(5-3)

5-2 ° 37

0.1
(/)

%10
20

Dimethyl

sulfoxide

Microtitter

()

300

96

plates

Micropipette

(°37)

Parafilm

48

200

Crystal violet stain

100

) 15

(

° 37

18-12

Distilled water

ELISA

492 nm

[]

[]

REF

AMN3

sulfoxide Dimethyl

125 25

) AMN3 REF
 / ()
 % .
 % . /
 % . % . / **AMN3**
 AMN
 Eugenol /
 .[] % .
 Antioxidant % . /
 (Scavenging) % . /

(3-hydroxyl group)

AMN (%)		:
		(/)
.	.	
.	.	
.	.	
.	.	

Breast (BC1) (HEP-2) :
 Human colon cancer(CASK1) carcinoma
 .[] Human prostate carcinoma (DV145)

REF

Rat Embryo Fibroblast(REF) /
 0.0005 AMN3

[]

.[]

Alternative and Complementary Medicine, **8**:813-821.

4. Azaizeh, H.; Saad, B.; Khalil, K. and Said, O. **2006**. The state of the art of traditional arab herbal medicine in the eastern region of the mediterranean: A review. *eCAM*, **3**:229-235.

5. Craig, W. J. **1999**. Health - promoting properties of common herbs. *Am. J. Clin. Nutr*, **70**: 491S-499S.

6. Vineristine Vinblastine
Catharanthus roseus

9. Shtayeh, M.S.A. and Abu-Ghdeib, S.I **1999**. Antifungal activity of plant extract against dermatophytes. *J. Mycoses*, **42**:665-672.

10. Withania
Somnifera Dun

11. Withania
somnifera Dun.

12. Withania
somnifera Dun.

13. Abdul-Majeed, M. R. **2000**. Induction and characterization of SU.99 plasmacytoma cell line and its effect on mice immune response. Ph.D. Thesis, Nahrain University, Baghdad.

14. **2005**.
Artemisia herba alb

15. **2004**.
Cyperus rotundns L.

16. Thatte, U.; Bagadey, S. and Dahanakar, S. **2000**. Modulation of programmed cell death

/

% .

% . /

% . % .

REF

/

/

% . % . % .

REF

REF AMN3

REF AMN3

REF :

REF		:
(%)		(/)

1. Hellman, S. **1997**. Principles of cancer management: *Radiation therapy*. In: V.T. DeVita; S. Hellman and S.A. Rosenberg (Eds.), *Cancer: principles and practice of oncology*, (5th ed.), Lippincott - Raven Publishers, Philadelphia, pp.307-332

2. DeVita, V. T. **1997**. Principles of cancer management: *chemotherapy*. In: V. T. DeVita; S. Hellman; S. A. Rosenberg and L.H. Raven (ed.). *Cancer principles and practice of oncology* (5thed.), Lippincott - Raven Publishers, Philadelphia, pp.333-348

3. Katz, A. E. **2002**. Flavonoid and botanical approaches to prostate health. *The Journal of*

Cortes, F.; Ayuso, M.J and Toro, M.V.
2003. Anti-tumour activity of *Digitalis purpurea* L. *subsp. heywoodii*. *Planta Med.*, **69**: 701-4.

by medicinal plants. *Cell Mol. Biol.*, **46**:199-214 .
17. Lopez-Lazaro, M.; Palma, D. L.; Pena, N.; Pastor, N.; Martin-Cordero, C.; Navarro, E.;