

Supplementary Material

Development of a Novel Series of Anticancer and Antidiabetic: Spirothiazolidines Analogs

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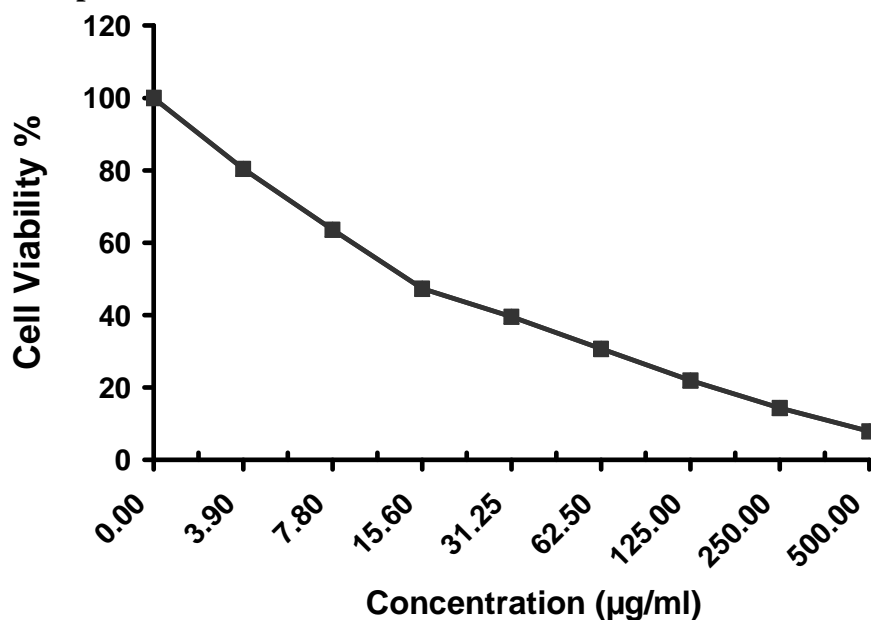
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Received: 13 June 2019; Accepted: 03 July 2019; Published: date

Evaluation of cytotoxicity against HepG-2 cell line

Requester Data:

Name: Dr. Walaa Ibrahim
Authority: National Research Center
Sample Code: 6

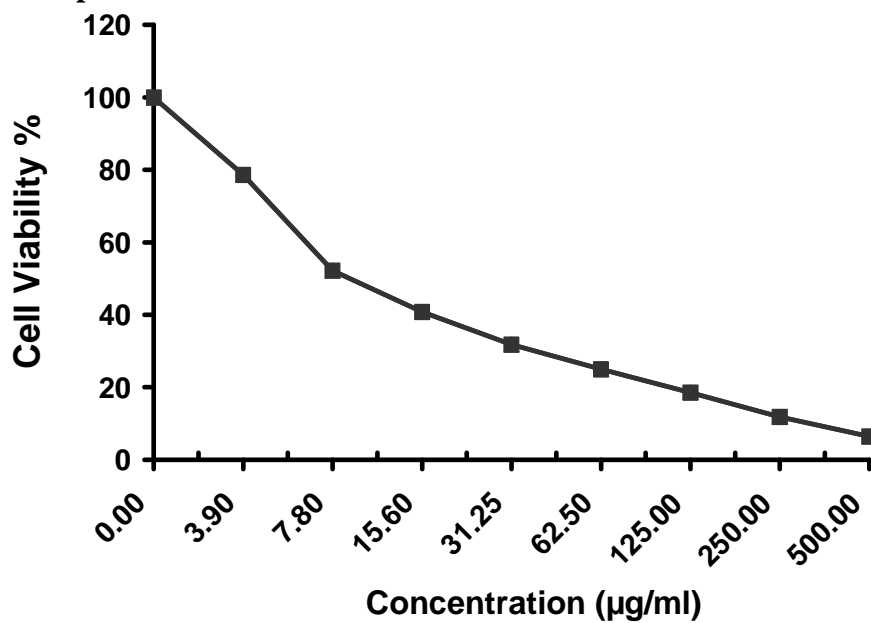


Sample conc. (µg/ml)	Viability %
500	7.95
250	14.36
125	21.97
62.5	30.69
31.25	39.56
15.6	47.28
7.8	63.57
3.9	80.41
0	100

Comment:

Inhibitory activity against Hepatocellular carcinoma cells was detected under these experimental conditions with $IC_{50} = 14.3 \mu\text{g/ml}$.

Sample Code: 14

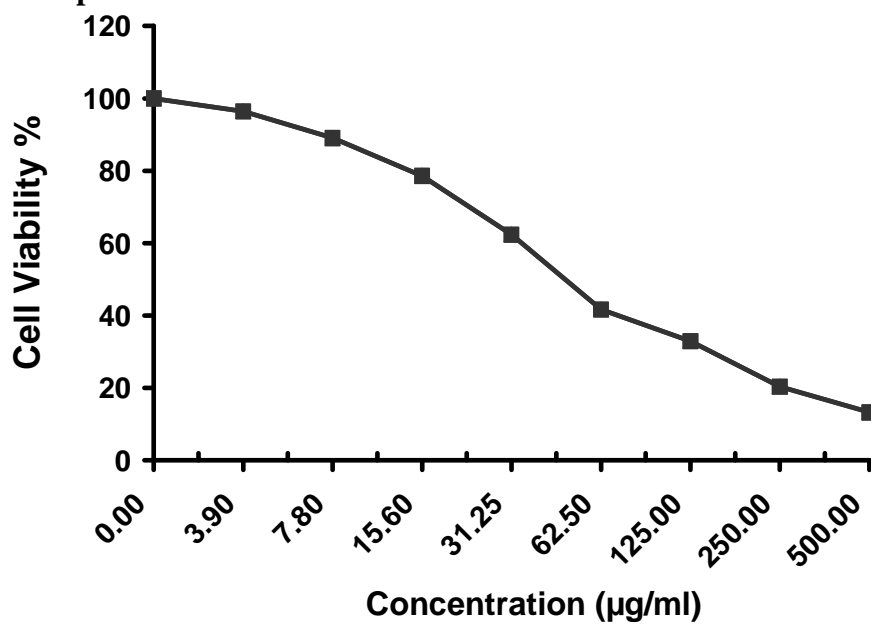


Sample conc. (µg/ml)	Viability %
500	6.42
250	11.79
125	18.56
62.5	24.95
31.25	31.78
15.6	40.76
7.8	52.19
3.9	78.63
0	100

Comment:

Inhibitory activity against Hepatocellular carcinoma cells was detected under these experimental conditions with $IC_{50} = 9.29 \mu\text{g/ml}$.

Sample Code: 16

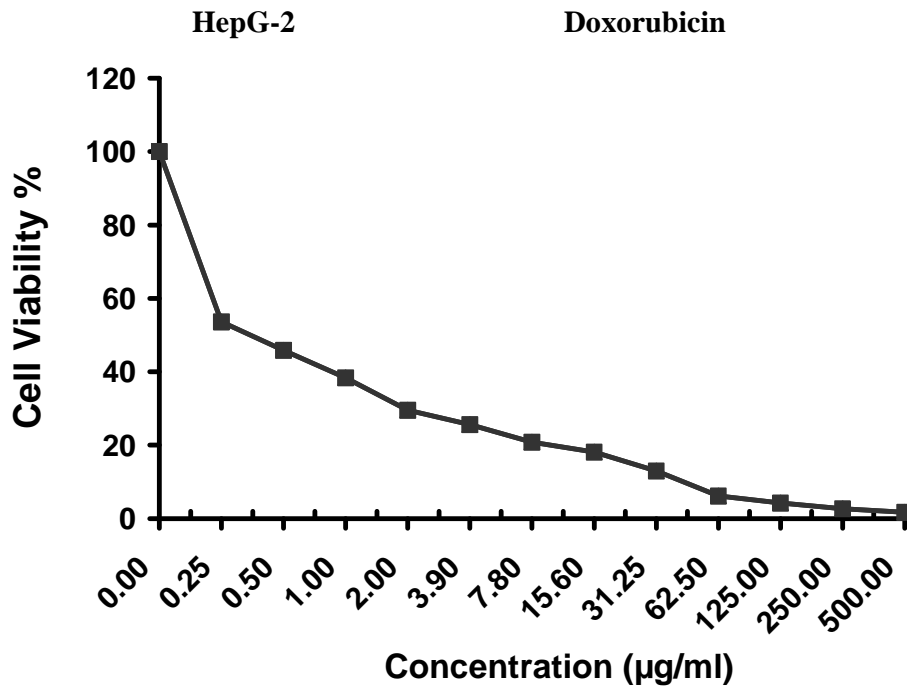


Sample conc. (µg/ml)	Viability %
500	13.28
250	20.41
125	32.94
62.5	41.70
31.25	62.37
15.6	78.59
7.8	89.06
3.9	96.41
0	100

Comment:

Inhibitory activity against Hepatocellular carcinoma cells was detected under these experimental conditions with $IC_{50} = 50 \mu\text{g/ml}$.

Sample Code: (Doxorubicin Reference Standard)



Sample conc. (µg/ml)	Viability %	Inhibition %	S.D. (±)
500	1.72	98.28	0.42
250	2.70	97.30	0.50
125	4.22	95.78	0.36
62.5	6.13	93.87	0.39
31.25	13.05	86.95	0.72
15.6	18.13	81.87	1.16
7.8	20.81	79.19	1.22
3.9	25.59	74.41	0.89
2	29.50	70.50	0.75
1	38.39	61.61	1.05
0.5	45.84	54.16	0.67
0.25	53.57	46.43	0.72
0	100	0.00	

Comment:

Inhibitory activity against Hepatocellular carcinoma cells was detected under these experimental conditions with $IC_{50} = 0.36 \mu\text{g/ml}$.

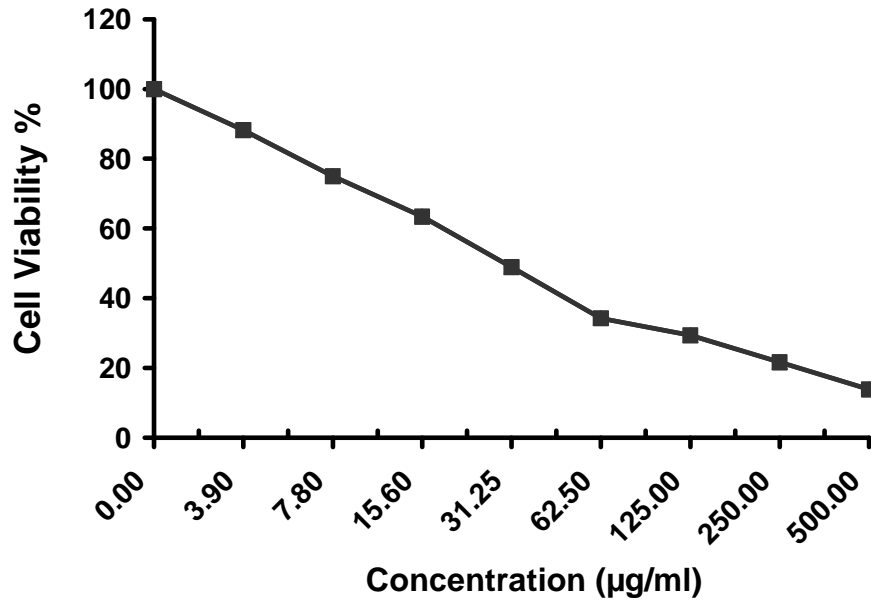
Evaluation of cytotoxicity against MCF-7 cell line

Requester Data:

Name: Dr. Walaa Ibraheem Ahmed

Authority: National Research Center

Sample Code: 6

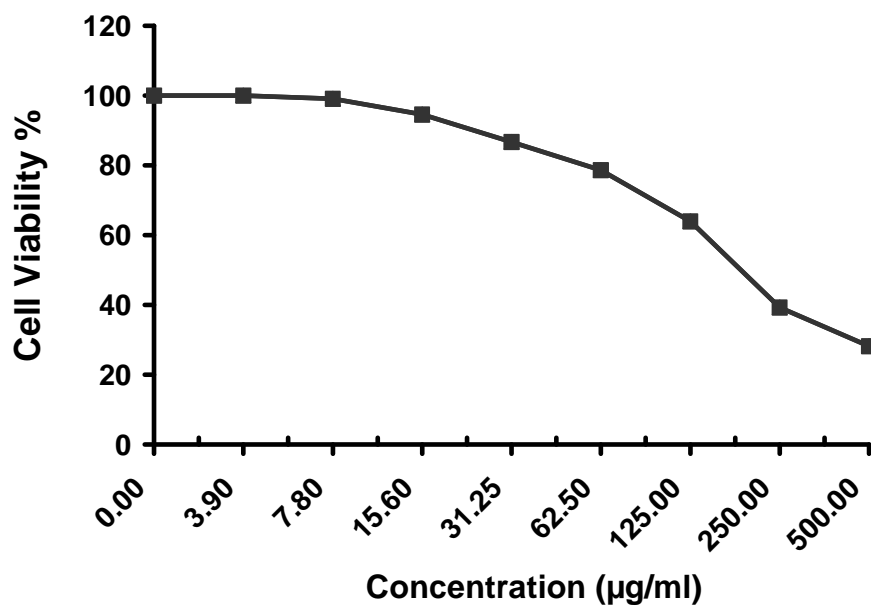


Sample conc. (µg/ml)	Viability %
500	13.87
250	21.64
125	29.38
62.5	34.25
31.25	48.92
15.6	63.37
7.8	74.95
3.9	88.23
0	100

Comment:

Inhibitory activity against Breast carcinoma cells was detected under these experimental conditions with $IC_{50} = 30 \mu\text{g/ml}$.

Sample Code: 8

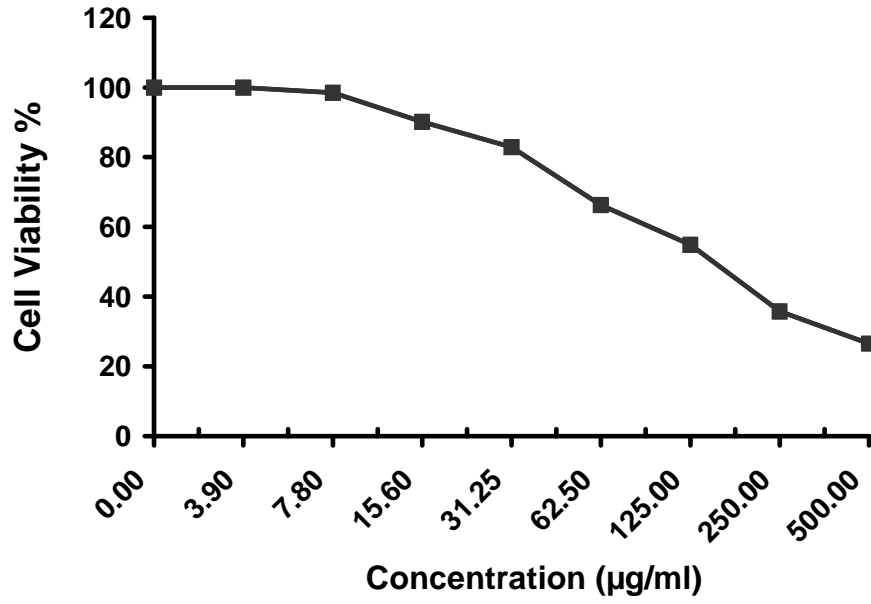


Sample conc. (µg/ml)	Viability %
500	28.15
250	39.34
125	63.96
62.5	78.64
31.25	86.72
15.6	94.57
7.8	99.12
3.9	100
0	100

Comment:

Inhibitory activity against Breast carcinoma cells was detected under these experimental conditions with $IC_{50} = 196 \mu\text{g/ml}$.

Sample Code: 12

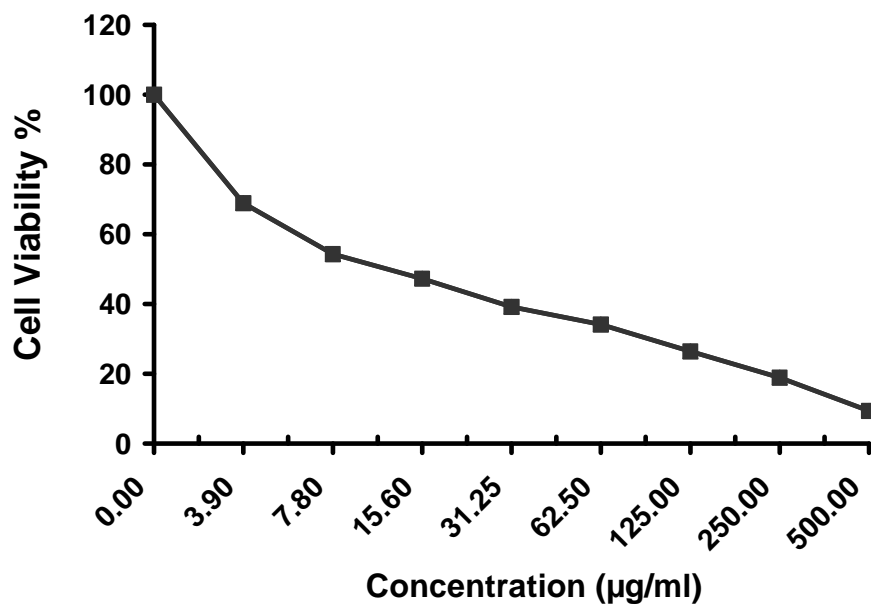


Sample conc. (µg/ml)	Viability %
500	26.57
250	35.76
125	54.82
62.5	66.25
31.25	82.89
15.6	90.12
7.8	98.49
3.9	100
0	100

Comment:

Inhibitory activity against Breast carcinoma cells was detected under these experimental conditions with $IC_{50} = 157 \mu\text{g/ml}$.

Sample Code: 14

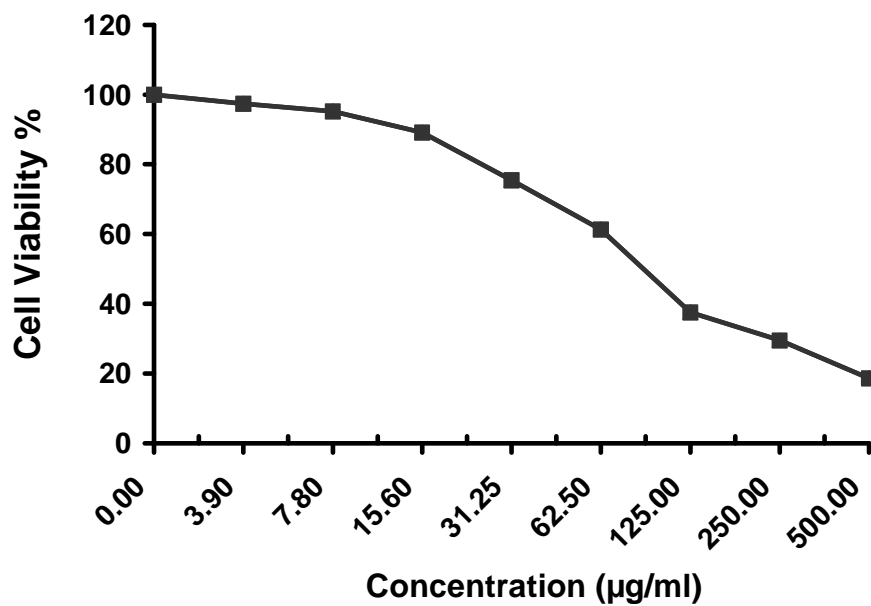


Sample conc. (µg/ml)	Viability %
500	9.38
250	18.92
125	26.43
62.5	34.18
31.25	39.22
15.6	47.31
7.8	54.28
3.9	68.94
0	100

Comment:

Inhibitory activity against Breast carcinoma cells was detected under these experimental conditions with $IC_{50} = 12.6 \mu\text{g/ml}$.

Sample Code: 16

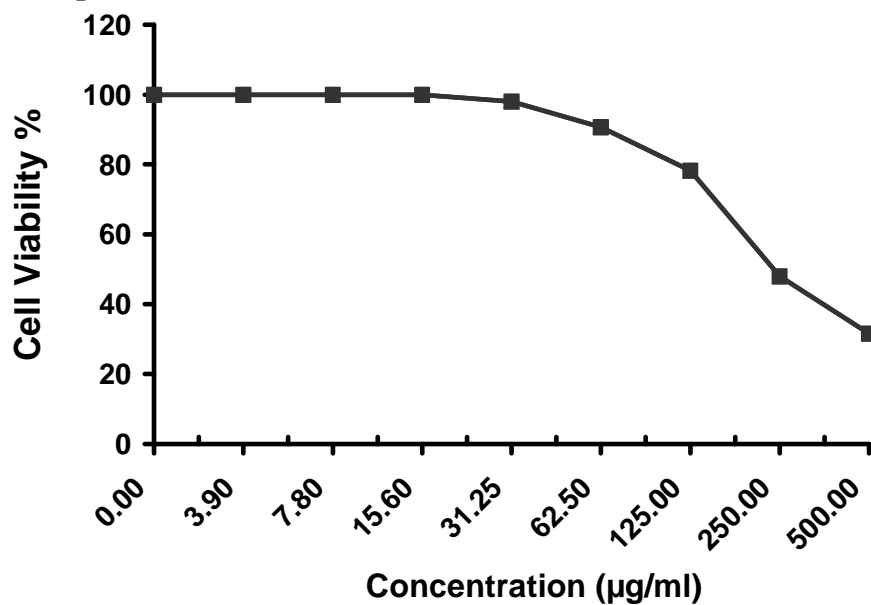


Sample conc. (µg/ml)	Viability %
500	18.62
250	29.48
125	37.53
62.5	61.35
31.25	75.42
15.6	89.13
7.8	95.24
3.9	97.37
0	100

Comment:

Inhibitory activity against Breast carcinoma cells was detected under these experimental conditions with $IC_{50} = 92.3 \mu\text{g/ml}$.

Sample Code: 4

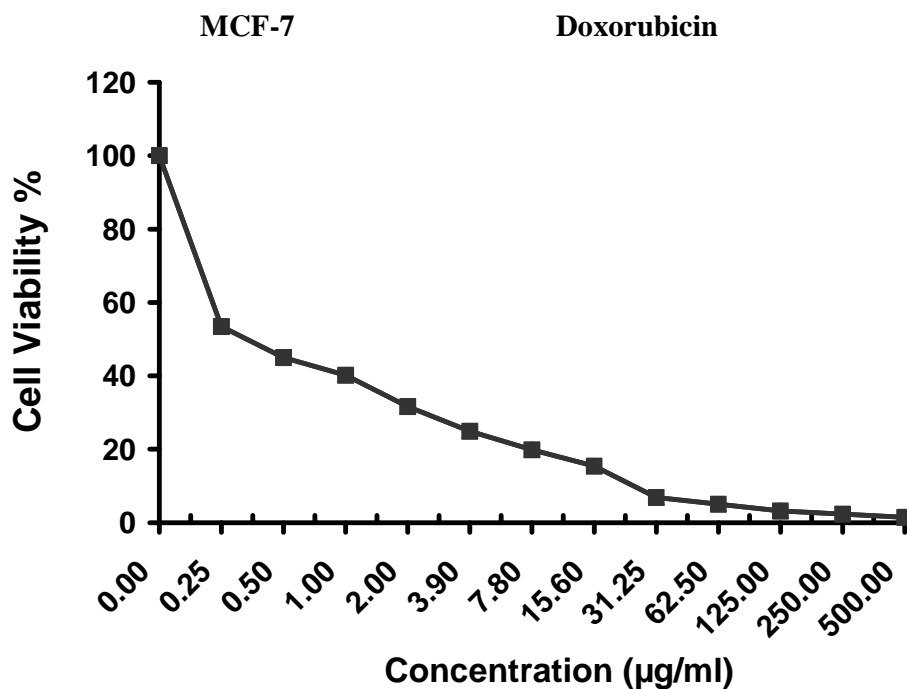


Sample conc. (µg/ml)	Viability %
500	31.62
250	47.96
125	78.27
62.5	90.66
31.25	98.03
15.6	100
7.8	100
3.9	100
0	100

Comment:

Inhibitory activity against Breast carcinoma cells was detected under these experimental conditions with $IC_{50} = 242 \mu\text{g/ml}$.

Sample Code: (Doxorubicin Reference Standard)



Sample conc. (µg/ml)	Viability %	Inhibition %	S.D. (±)
500	1.51	98.49	0.17
250	2.36	97.64	0.26
125	3.21	96.79	0.21
62.5	5.07	94.93	0.32
31.25	6.93	93.07	0.29
15.6	15.46	84.54	1.07
7.8	19.89	80.11	1.27
3.9	24.98	75.02	1.30
2	31.69	68.31	0.82
1	40.17	59.83	1.53
0.5	45.02	54.98	1.11
0.25	53.41	46.59	0.85
0	100	0.00	

Comment:

Inhibitory activity against Breast carcinoma cells was detected under these experimental conditions with $IC_{50} = 0.35 \mu\text{g/ml}$.