SUPPLEMENTARY MATERIAL

Selected Pentacyclic Triterpenoids and Their Derivatives as Biologically Active Compounds

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Table S1. The IC_{50} values of the compounds **3b**, **3d**, **3i** and **3r** in the 60 cell lines of the nine different cancers [44].

Cancer	Subpanel	Cytotoxicity of the compounds **3b**, **3d**, **3i** and **3r** (IC_{50} [μM])			
		3b	**3d**	**3i**	**3r**
Leukemia	CCRF-CEM	4.47	6.03	5.25	9.33
	HL-60 (TB)	4.37	3.90	4.37	19.90
	K-562	3.39	2.80	3.24	6.30
	MOLT-4	3.31	4.10	4.07	8.30
	RPMI-8226	4.10	9.12	4.79	13.40
	SR	5.30	6.76	6.46	19.05
NSCLC	EKVX	10.50	10.70	7.59	16.90
	HOP-62	7.24	13.80	6.92	15.80
	HOP-92	20.90	41.70	85.10	27.50
	NCI-H226	13.50	22.90	20.90	33.10
	NCI-H23	7.41	10.70	6.46	16.20
	NCI-322M	9.33	13.20	8.71	19.05
	NCI-H460	4.57	5.62	3.02	8.51
	NCI-HS22	9.33	13.80	7.41	20.40
Colon cancer	COLO205	4.47	8.51	3.47	0.18
	HCC-2998	5.75	6.90	5.75	12.50
	HCT-116	3.39	4.20	3.24	6.30
	HCT-15	2.75	3.16	2.82	4.20
	HT-29	4.68	6.76	4.17	18.10
	KM 12	7.41	8.51	7.94	13.40

	SW-620	5.75	9.33	4.37	16.50
CNS cancer	CF-268	15.50	34.70	9.77	25.70
	SF-295	4.47	6.03	4.47	10.00
	SF-539	6.61	14.80	6.17	23.90
	SNB-19	7.41	20.00	7.08	13.50
	SNB-75	21.90	---	---	39.80
	U 251	4.07	52.50	4.37	3.20
Melanoma	LOX IMVI	4.27	5.13	4.17	7.20
	MALME-3M	14.50	19.50	11.20	0.54
	M14	12.30	18.20	6.92	0.90
	MDA-MB-435	10.00	17.40	6.31	0.80
	SK-MEL-2	15.50	20.40	12.00	3.60
	SK-MEL-28	13.50	22.90	12.00	3.80
	SK-MEL-5	5.37	7.41	5.89	0.46
	UACC-257	14.80	24.50	9.77	0.47
	UACC-62	12.90	20.90	13.20	0.70
Ovarian cancer	IGROV-1	8.71	13.20	7.24	19.4
	OVCAR-3	6.03	8.71	5.25	16.90
	OVCAR-4	15.50	24.00	10.00	44.60
	OVCAR-5	17.40	26.90	9.33	29.50
	OVCAR-8	6.61	14.80	5.62	19.40

	NCI/ADR-RES	5.25	8.13	5.13	13.40
	SK-OV-3	13.50	28.20	9.12	60.20
Renal cancer	786-0	7.59	14.80	5.62	33.80
	A498	25.70	28.80	45.70	37.10
	ACHN	4.37	5.75	3.98	0.47
	CAKI-1	6.61	16.60	5.25	36.30
	RXF-393	9.55	26.90	14.50	28.10
	SN 12C	6.92	15.50	5.01	20.40
	TK-10	15.80	55.00	17.80	38.90
	UO-31	7.24	12.00	6.61	16.90
Prostate cancer	PC-3	5.75	7.24	6.76	19.05
	DU-145	11.00	9.55	5.89	21.80
Breast cancer	MCF-7	4.68	5.75	4.27	13.40
	MDA-MB-231/ATCC	19.50	26.30	11.50	30.90
	HS587T	26.30	97.70	---	67.60
	BT-549	17.00	20.90	20.00	23.90
	T-47D	24.50	66.10	22.40	83.10
	MDA-MB-468	10.50	13.80	7.59	0.69

Table S2. The *in vitro* cytotoxicity of the extracts from the leaves of *C. hakodae* made by dichloromethane (CH-C) and ethyl acetate (CH-E), and the *in vitro* cytotoxicity of **11e**, **11f** and **11g** in four human cell lines [lung (LU), breast (MCF7), epidermoid (KB) and hepatoma (HepG2)] [105].

Sample	IC_{50} ± SD [μM]			
	KB	HepG2	LU	MCF7
CH-C	49.6	109.71	73.14	68.2
CH-E	25.6	51.07	53.33	137.84
11e	inactive	inactive	inactive	inactive
11f	71.25 ± 3.12	71.18 ± 1.35	65.28 ± 3.19	72.96 ± 1.63
11g	20.48 ± 1.26	82.73 ± 1.45	23.83 ± 1.94	31.25 ± 2.46
Ellipticine [a]	0.31 ± 0.02	0.56 ± 0.04	0.40 ± 0.05	0.51 ± 0.05

[a] Ellipticine was used as the positive reference.

Table S3. The cytotoxicity values of the compounds **11αb**, **11βb**, **11αc**, **11βc** and **11αd** obtained from the cell viability assay (MTT) in THP-1 and K-562 cell lines. The cytotoxicity values were compared with those of Imatinib or Cytarabine [106].

Compound	IC_{50} ± SD [μM] [a]	
	THP-1 [b]	K-562 [c]
11αb	339 ± 8	396 ± 13
11βb	266 ± 6	918 ± 43
11αc	326 ± 8	267 ± 5
11βc	377 ± 36	388 ± 40
11αd	572 ± 88	355 ± 30
Imatinib [d]	Not determined	35 ± 4
Cytarabine [d]	41 ± 8	Not determined

[a] The cytotoxicity values (IC_{50} ± SD [μM]) were presented as the means from the two independent experiments; [b] THP-1, acute monocytic leukemia cell line; [c] K-562, chronic myeloid leukemia cell line; [d] the positive references.