

Annex 1. Antiproliferative activities against cancer cell lines treated with extracts at a concentration of 10 µg/ml during an exposure time of 72 h (mean ± SEM). Values >50% are highlighted.

Species in tribes	Plant parts	cell lines	Solvents				
			<i>n</i> -hexane	CHCl ₃	MeOH–H ₂ O 1:1	H ₂ O	
CYNAREAE							
<i>Arctium lappa</i> L.	buds	HeLa	12.05 ± 1.77	5.36 ± 1.86	12.43 ± 2.07	5.72 ± 1.94	
		MCF-7	4.46 ± 4.13	34.12 ± 1.57	12.21 ± 1.62	1.49 ± 1.63	
		A-431	27.39 ± 0.92	25.15 ± 2.72	1.76 ± 2.14	-6.75 ± 2.47	
	leaves	HeLa	19.92 ± 2.55	68.06 ± 3.13	5.46 ± 1.88	4.23 ± 0.77	
		MCF-7	14.58 ± 1.86	83.38 ± 0.80	37.56 ± 2.72	5.52 ± 5.39	
		A-431	4.61 ± 3.34	92.42 ± 0.62	14.62 ± 1.57	-2.98 ± 4.56	
<i>Arctium tomentosum</i> MILL.	leaves	HeLa	7.53 ± 2.32	46.68 ± 1.46	5.66 ± 1.01	-0.32 ± 2.28	
	MCF-7	10.75 ± 2.35	78.21 ± 0.94	16.80 ± 2.18	21.83 ± 2.02		
<i>Carduus acanthoides</i> L.	herbs	HeLa	4.61 ± 2.03	12.49 ± 1.81	8.73 ± 1.36	9.38 ± 2.40	
		MCF-7	27.53 ± 1.84	2.19 ± 2.74	23.84 ± 4.25	-7.74 ± 2.28	
		A-431	12.08 ± 1.27	7.14 ± 3.29	19.41 ± 1.80	11.95 ± 3.02	
	roots	HeLa	21.25 ± 1.97	12.69 ± 1.23	8.64 ± 2.53	14.13 ± 1.82	
		MCF-7	28.66 ± 3.25	6.76 ± 2.70	4.26 ± 1.22	18.72 ± 1.38	
		A-431	27.19 ± 3.48	36.55 ± 2.13	15.23 ± 2.14	22.57 ± 3.14	
<i>Carduus nutans</i> L.	herbs	HeLa	7.75 ± 2.36	9.77 ± 1.51	12.08 ± 3.55	6.80 ± 1.41	
	MCF-7	-3.97 ± 4.20	-2.08 ± 4.92	14.16 ± 2.99	-2.59 ± 4.21		
	A-431	9.93 ± 1.97	14.07 ± 2.35	27.32 ± 1.24	11.86 ± 3.00		
<i>Carthamus lanatus</i> L.	herbs	HeLa	19.29 ± 3.01	19.74 ± 2.67	11.26 ± 1.55	10.56 ± 1.48	
	MCF-7	-9.98 ± 3.96	-1.99 ± 4.75	13.34 ± 2.37	12.40 ± 2.83		
	A-431	-0.33 ± 2.38	1.30 ± 4.12	11.02 ± 4.87	7.79 ± 3.86		
<i>Centaurea biebersteinii</i> D. C.	herbs	HeLa	12.23 ± 1.48	31.30 ± 2.64	11.73 ± 2.24	5.34 ± 2.76	
	MCF-7	-2.20 ± 6.67	87.40 ± 0.61	12.74 ± 2.83	1.53 ± 9.43		
	A-431	13.06 ± 5.03	88.41 ± 4.98	5.36 ± 3.00	10.58 ± 4.65		
<i>Centaurea jacea</i> L.	flowers /fruits	HeLa	14.78 ± 1.89	68.24 ± 3.63	12.17 ± 2.63	26.02 ± 3.58	
		MCF-7	11.19 ± 4.49	20.81 ± 2.19	16.80 ± 2.63	9.16 ± 1.79	
		A-431	9.91 ± 1.52	18.75 ± 2.13	4.43 ± 3.43	1.43 ± 0.73	
	leaves	HeLa	-1.73 ± 1.11	57.46 ± 0.70	10.96 ± 3.35	-5.36 ± 2.14	
		MCF-7	16.35 ± 1.77	44.28 ± 1.17	30.56 ± 1.02	13.54 ± 3.04	
		A-431	4.44 ± 3.41	43.15 ± 1.87	16.52 ± 3.23	4.84 ± 3.24	
	roots	HeLa	53.10 ± 1.15	86.19 ± 0.48	68.08 ± 1.21	41.92 ± 1.14	
		MCF-7	30.11 ± 2.92	63.98 ± 1.18	37.18 ± 2.10	20.03 ± 2.20	
		A-431	17.73 ± 1.74	68.50 ± 2.19	9.32 ± 2.05	6.67 ± 2.54	
	<i>Centaurea spinulosa</i> ROCHEL	flowers /fruits	HeLa	15.81 ± 1.70	23.51 ± 3.67	2.72 ± 2.97	7.68 ± 2.99
			MCF-7	9.89 ± 2.87	43.35 ± 1.62	3.66 ± 1.26	3.83 ± 2.52
			A-431	1.30 ± 4.12	20.51 ± 3.35	6.38 ± 5.41	1.93 ± 4.26
herbs		HeLa	6.56 ± 1.87	19.73 ± 2.07	13.27 ± 2.07	0.94 ± 3.46	
		MCF-7	14.54 ± 2.39	64.59 ± 1.39	19.66 ± 4.55	12.31 ± 1.26	
		A-431	-0.19 ± 4.58	40.11 ± 2.28	18.62 ± 0.63	6.44 ± 4.57	
roots	HeLa	24.02 ± 1.67	22.24 ± 2.17	3.18 ± 1.59	24.26 ± 2.05		
	MCF-7	19.05 ± 1.46	31.19 ± 1.80	19.35 ± 1.37	29.88 ± 2.74		
	A-431	47.68 ± 0.91	31.24 ± 3.43	25.15 ± 2.33	25.15 ± 0.81		
<i>Cirsium arvense</i> (L.) SCOP.	herbs	HeLa	16.40 ± 1.85	15.69 ± 1.96	21.15 ± 1.85	2.88 ± 1.21	
		MCF-7	17.49 ± 4.81	2.84 ± 2.51	5.73 ± 1.72	-3.96 ± 2.52	
		A-431	4.00 ± 5.48	8.83 ± 1.54	8.08 ± 2.42	3.49 ± 2.71	
	roots	HeLa	12.09 ± 1.49	12.91 ± 1.71	8.36 ± 2.71	12.60 ± 1.42	
		MCF-7	12.09 ± 3.33	18.42 ± 2.13	11.81 ± 1.94	26.61 ± 2.00	
		A-431	11.36 ± 3.30	11.13 ± 3.56	9.97 ± 1.71	19.78 ± 3.13	
<i>Cirsium vulgare</i> (SAVI) TEN.	flowers /fruits	HeLa	14.55 ± 1.56	60.42 ± 1.63	25.94 ± 3.24	5.54 ± 3.83	
		MCF-7	-2.32 ± 2.07	9.04 ± 2.70	-0.02 ± 1.07	21.09 ± 1.69	
		A-431	1.72 ± 2.59	18.36 ± 2.42	5.92 ± 1.52	9.11 ± 1.44	
	leaves	HeLa	22.91 ± 0.90	22.78 ± 2.41	13.53 ± 2.25	9.84 ± 2.54	
		MCF-7	-4.92 ± 5.83	0.77 ± 5.34	1.21 ± 2.70	1.39 ± 4.99	
		A-431	1.43 ± 3.11	1.11 ± 3.04	-0.74 ± 5.88	-6.30 ± 3.33	
<i>Echinops ruthenicus</i> M. BIEB.	leaves	HeLa	6.75 ± 1.49	24.77 ± 1.40	25.65 ± 1.84	14.27 ± 2.12	
	MCF-7	-6.89 ± 4.96	2.69 ± 5.10	-24.66 ± 1.31	-4.11 ± 4.37		
	A-431	0.18 ± 3.69	-3.82 ± 1.60	25.40 ± 1.31	2.75 ± 3.20		
<i>Echinops ruthenicus</i> M. BIEB.	roots	HeLa	16.9 ± 63.83	13.03 ± 2.67	14.52 ± 2.03	10.98 ± 1.84	
		MCF-7	-13.00 ± 5.90	8.65 ± 4.93	8.40 ± 1.92	25.91 ± 6.20	
		A-431	4.20 ± 2.56	10.18 ± 3.57	-2.33 ± 1.52	21.92 ± 4.93	
	roots	HeLa	16.9 ± 63.83	13.03 ± 2.67	14.52 ± 2.03	10.98 ± 1.84	
		MCF-7	-13.00 ± 5.90	8.65 ± 4.93	8.40 ± 1.92	25.91 ± 6.20	
		A-431	4.20 ± 2.56	10.18 ± 3.57	-2.33 ± 1.52	21.92 ± 4.93	
<i>Onopordum acanthium</i> L.	flowers	HeLa	13.07 ± 3.13	29.82 ± 1.35	3.70 ± 2.01	5.40 ± 2.65	
	MCF-7	9.12 ± 4.29	24.30 ± 1.07	4.05 ± 2.32	7.13 ± 2.24		
	A-431	12.40 ± 1.21	29.93 ± 3.64	5.24 ± 3.04	-1.43 ± 1.46		

Annex 1. (continued)			n-hexane	CHCl ₃	MeOH-H ₂ O 1:1	H ₂ O	
<i>Onopordum acanthium</i> L.	leaves	HeLa	9.16 ± 1.44	70.46 ± 3.36	11.10 ± 1.21	0.92 ± 2.00	
		MCF-7	1.77 ± 1.21	85.06 ± 0.75	14.17 ± 2.53	-0.59 ± 2.41	
		A-431	2.33 ± 1.88	76.56 ± 0.96	14.89 ± 0.97	-0.61 ± 1.88	
	roots	HeLa	23.94 ± 1.97	78.71 ± 0.22	15.37 ± 12.55	1.70 ± 2.53	
		MCF-7	43.89 ± 1.69	87.10 ± 0.41	-0.57 ± 2.97	-5.36 ± 8.74	
		A-431	17.55 ± 2.82	53.06 ± 0.42	12.76 ± 4.08	2.60 ± 3.51	
	<i>Xeranthemum annuum</i> L.	flowers	HeLa	10.24 ± 1.86	9.46 ± 0.94	6.97 ± 1.41	3.89 ± 1.59
			MCF-7	1.58 ± 1.62	9.53 ± 3.09	7.86 ± 2.89	10.97 ± 2.11
			A-431	14.61 ± 3.50	17.03 ± 2.34	9.09 ± 3.44	16.19 ± 3.33
herbs		HeLa	2.32 ± 1.86	10.66 ± 1.64	9.61 ± 1.47	2.69 ± 1.70	
		MCF-7	7.26 ± 1.75	16.39 ± 1.63	18.80 ± 2.39	13.41 ± 2.40	
		A-431	14.11 ± 2.36	9.50 ± 3.32	14.92 ± 3.35	7.57 ± 1.54	
roots		HeLa	6.63 ± 1.70	17.66 ± 1.29	22.03 ± 2.66	2.58 ± 1.98	
		MCF-7	2.79 ± 1.17	24.87 ± 2.26	21.95 ± 1.35	21.74 ± 1.00	
		A-431	20.56 ± 4.25	25.47 ± 2.31	17.00 ± 1.96	15.31 ± 4.34	
CICHORIEAE syn. LACTUCEAE							
<i>Chondrilla juncea</i> L.	leaves	HeLa	8.42 ± 1.57	17.89 ± 1.40	11.81 ± 1.72	11.57 ± 4.71	
		MCF-7	-3.90 ± 5.9	16.67 ± 4.57	-3.88 ± 2.12	5.29 ± 3.22	
		A-431	4.76 ± 3.52	20.50 ± 1.66	-1.20 ± 4.44	1.31 ± 2.49	
	roots	HeLa	17.54 ± 1.99	16.10 ± 3.28	12.14 ± 2.80	-3.05 ± 1.7	
		MCF-7	18.43 ± 4.29	45.06 ± 1.38	9.23 ± 8.98	1.05 ± 5.88	
		A-431	13.38 ± 4.10	28.14 ± 2.93	2.07 ± 3.59	-3.58 ± 1.60	
<i>Cichorium intybus</i> L.	leaves	HeLa	16.10 ± 2.05	47.25 ± 1.61	20.27 ± 1.49	4.84 ± 1.24	
		MCF-7	-6.00 ± 5.68	78.07 ± 0.59	5.00 ± 4.08	12.87 ± 3.05	
		A-431	8.60 ± 5.06	73.38 ± 2.59	4.22 ± 4.32	8.45 ± 5.93	
<i>Crepis rhoeadifolia</i> M. BIEB.	leaves	HeLa	22.22 ± 3.02	17.73 ± 3.95	13.58 ± 5.22	16.28 ± 4.97	
		MCF-7	-3.20 ± 2.52	7.54 ± 2.68	-2.06 ± 4.91	3.75 ± 3.97	
		A-431	4.33 ± 3.97	5.58 ± 4.62	3.12 ± 2.63	3.12 ± 2.06	
	roots	HeLa	15.54 ± 1.23	12.37 ± 1.51	10.16 ± 2.26	13.60 ± 0.65	
		MCF-7	20.33 ± 2.44	15.48 ± 2.53	13.99 ± 4.74	36.14 ± 1.14	
		A-431	41.47 ± 1.90	17.25 ± 3.25	6.75 ± 3.03	25.43 ± 3.02	
<i>Crepis tectorum</i> L.	herbs	HeLa	27.46 ± 1.84	21.30 ± 2.92	15.42 ± 2.13	17.54 ± 2.88	
		MCF-7	12.12 ± 1.68	15.09 ± 4.89	10.30 ± 0.97	-1.47 ± 4.00	
		A-431	24.54 ± 1.42	17.05 ± 3.25	12.25 ± 1.45	4.36 ± 2.20	
	roots	HeLa	15.40 ± 1.16	15.32 ± 3.28	10.09 ± 2.07	23.20 ± 2.05	
		MCF-7	24.82 ± 3.21	25.16 ± 2.20	12.57 ± 1.28	32.80 ± 1.30	
		A-431	37.66 ± 1.96	18.59 ± 4.63	16.87 ± 3.35	28.42 ± 2.96	
<i>Hieracium umbellatum</i> L.	herbs	HeLa	-1.44 ± 1.80	5.26 ± 1.34	3.92 ± 1.67	3.30 ± 1.30	
		MCF-7	9.22 ± 1.46	15.20 ± 4.52	3.04 ± 1.33	-3.78 ± 0.66	
		A-431	7.30 ± 0.34	14.11 ± 6.96	-2.46 ± 3.07	-4.73 ± 3.73	
<i>Lactuca serriola</i> L.	leaves	HeLa	4.05 ± 3.32	20.63 ± 1.66	29.61 ± 1.54	2.01 ± 1.70	
		MCF-7	14.33 ± 5.66	7.99 ± 5.09	27.59 ± 1.72	7.29 ± 5.43	
		A-431	6.27 ± 1.61	3.41 ± 1.49	26.69 ± 2.66	6.17 ± 1.40	
	roots	HeLa	27.45 ± 0.93	34.19 ± 2.01	-3.06 ± 2.99	20.32 ± 2.24	
		MCF-7	6.64 ± 5.01	36.77 ± 1.49	3.56 ± 5.64	14.12 ± 3.51	
		A-431	31.14 ± 1.62	28.54 ± 1.89	9.37 ± 4.78	12.33 ± 3.18	
<i>Lactuca viminea</i> J.PRESL & C.PRESL	herbs	HeLa	27.84 ± 1.78	11.15 ± 2.34	1.89 ± 2.39	-3.93 ± 2.05	
		MCF-7	4.81 ± 2.67	25.51 ± 1.33	18.06 ± 2.01	6.51 ± 1.52	
		A-431	23.86 ± 2.89	23.06 ± 1.90	20.50 ± 6.52	2.06 ± 0.79	
	roots	HeLa	50.42 ± 0.66	45.88 ± 1.53	8.78 ± 1.53	0.30 ± 1.82	
		MCF-7	27.12 ± 1.68	27.48 ± 2.20	2.32 ± 0.80	-1.17 ± 2.21	
		A-431	53.18 ± 2.10	55.32 ± 2.01	8.24 ± 3.61	3.87 ± 2.60	
<i>Picris hieracioides</i> L.	herbs	HeLa	8.16 ± 2.60	6.04 ± 2.45	0.19 ± 2.85	-7.12 ± 2.16	
		MCF-7	7.10 ± 2.52	14.26 ± 0.74	3.69 ± 2.73	-5.28 ± 3.11	
		A-431	30.74 ± 1.70	25.28 ± 3.65	6.32 ± 2.90	10.62 ± 4.04	
<i>Picris hieracioides</i> L.	roots	HeLa	21.53 ± 1.32	16.65 ± 2.27	10.14 ± 3.09	8.73 ± 2.29	
		MCF-7	7.29 ± 1.67	3.31 ± 2.45	11.11 ± 2.58	17.41 ± 1.51	
		A-431	46.46 ± 1.66	32.17 ± 0.76	23.51 ± 1.71	19.61 ± 2.76	
<i>Scorzonera austriaca</i> WILLD.	leaves	HeLa	6.90 ± 1.79	10.67 ± 1.61	16.38 ± 2.49	1.40 ± 1.48	
		MCF-7	5.32 ± 2.18	34.35 ± 1.89	15.72 ± 1.90	1.96 ± 2.21	
		A-431	2.37 ± 4.07	25.23 ± 1.70	17.26 ± 3.27	1.86 ± 2.14	
	roots	HeLa	18.91 ± 2.27	77.27 ± 1.99	13.93 ± 1.52	5.83 ± 1.31	
		MCF-7	35.48 ± 4.97	83.79 ± 1.99	13.85 ± 3.76	7.85 ± 2.68	
		A-431	48.11 ± 0.41	86.32 ± 0.66	19.52 ± 1.84	8.38 ± 4.29	
<i>Sonchus oleraceus</i> L.	herbs	HeLa	7.81 ± 1.45	16.12 ± 2.42	4.41 ± 1.27	3.76 ± 1.34	
		MCF-7	16.56 ± 4.43	8.44 ± 1.55	12.63 ± 3.63	-0.64 ± 4.81	
		A-431	21.46 ± 3.05	15.69 ± 2.24	17.18 ± 2.16	4.90 ± 2.73	
	roots	HeLa	38.46 ± 1.28	16.21 ± 3.37	-6.88 ± 2.57	-6.85 ± 2.44	
		MCF-7	2.97 ± 1.76	11.97 ± 2.87	4.92 ± 1.52	6.79 ± 3.72	
		A-431	37.75 ± 1.86	29.55 ± 1.40	16.38 ± 3.84	8.54 ± 3.12	

Annex 1. (continued)			n-hexane	CHCl ₃	MeOH-H ₂ O 1:1	H ₂ O	
<i>Taraxacum officinale</i> (L.) WEBER	flowers	HeLa	4.30 ± 0.90	12.58 ± 1.54	7.71 ± 1.41	11.65 ± 1.30	
		MCF-7	4.09 ± 1.75	-9.04 ± 4.43	19.11 ± 0.95	11.93 ± 2.03	
		A-431	23.64 ± 2.94	20.33 ± 4.55	29.55 ± 1.53	15.73 ± 3.08	
	herbs	HeLa	10.24 ± 3.53	32.67 ± 1.00	8.34 ± 2.25	10.22 ± 1.28	
		MCF-7	7.24 ± 1.50	36.86 ± 1.23	7.51 ± 1.68	6.86 ± 3.66	
		A-431	17.59 ± 3.28	32.25 ± 1.68	17.47 ± 3.88	10.43 ± 3.19	
	roots	HeLa	26.37 ± 1.32	26.07 ± 1.57	27.90 ± 1.69	6.93 ± 0.78	
		MCF-7	11.61 ± 5.38	17.46 ± 1.69	16.40 ± 2.09	6.40 ± 1.78	
		A-431	25.45 ± 2.62	21.94 ± 0.57	27.30 ± 1.84	10.74 ± 2.90	
<i>Tragopogon pratensis</i> L.	herbs	HeLa	17.38 ± 2.43	23.79 ± 2.31	18.45 ± 0.94	-11.95 ± 4.10	
		MCF-7	6.96 ± 3.11	-7.04 ± 4.81	7.29 ± 4.78	-0.21 ± 3.31	
		A-431	22.04 ± 3.57	12.63 ± 4.42	20.95 ± 2.17	15.36 ± 1.69	
ASTEREAE							
<i>Aster lanceolatus</i> WILLD.	herbs	HeLa	2.90 ± 1.39	14.69 ± 1.78	11.17 ± 2.07	4.26 ± 1.96	
		MCF-7	11.07 ± 0.98	14.28 ± 2.23	19.45 ± 0.97	20.97 ± 2.35	
		A-431	8.00 ± 1.55	12.08 ± 3.88	20.70 ± 1.48	16.96 ± 1.12	
		HeLa	1.70 ± 1.78	13.74 ± 1.42	7.90 ± 2.34	-0.09 ± 1.44	
<i>Aster linosyris</i> BERNH.	herbs	MCF-7	0.82 ± 1.69	9.34 ± 3.19	10.39 ± 2.43	12.85 ± 3.72	
		A-431	-3.86 ± 0.50	2.34 ± 3.37	3.13 ± 2.94	-1.26 ± 0.51	
		HeLa	27.26 ± 0.64	29.51 ± 1.89	9.88 ± 2.15	2.89 ± 2.59	
	roots	MCF-7	15.45 ± 2.49	1.02 ± 2.45	-2.89 ± 2.68	1.95 ± 2.85	
A-431		23.33 ± 2.91	21.67 ± 3.24	8.46 ± 1.27	11.10 ± 1.25		
HeLa		11.23 ± 1.71	11.35 ± 2.18	17.63 ± 1.49	-9.90 ± 1.81		
<i>Erigeron canadensis</i> L.	herbs	MCF-7	58.14 ± 1.36	59.18 ± 2.16	-3.42 ± 6.21	38.03 ± 9.06	
		A-431	27.01 ± 2.33	30.95 ± 1.16	2.84 ± 3.69	7.01 ± 1.88	
		HeLa	20.19 ± 2.33	11.37 ± 1.93	11.76 ± 1.98	6.75 ± 2.12	
	flowers	MCF-7	19.48 ± 3.75	-1.73 ± 5.27	7.19 ± 6.34	-2.64 ± 6.40	
		A-431	16.31 ± 2.06	-5.04 ± 4.39	-9.73 ± 3.71	-11.78 ± 6.7	
		HeLa	70.10 ± 0.63	44.99 ± 1.78	11.56 ± 1.67	-17.34 ± 2.78	
	roots	MCF-7	63.51 ± 0.89	47.86 ± 1.78	0.88 ± 2.72	-16.71 ± 3.57	
		A-431	62.37 ± 0.85	39.26 ± 0.97	0.98 ± 4.03	-12.3 ± 5.12	
		HeLa	11.22 ± 2.49	24.79 ± 2.49	11.89 ± 1.72	4.62 ± 1.48	
	<i>Erigeron annuus</i> PERS.	herbs	MCF-7	6.85 ± 2.56	-14.59 ± 3.45	6.06 ± 1.75	15.07 ± 3.36
			A-431	9.75 ± 1.82	7.06 ± 0.64	15.07 ± 3.36	0.59 ± 3.415.8
			HeLa	25.05 ± 1.59	23.78 ± 1.50	4.09 ± 1.30	5.28 ± 1.70
roots		MCF-7	62.54 ± 1.63	55.29 ± 5.11	15.96 ± 2.61	13.99 ± 2.69	
		A-431	35.87 ± 3.82	26.91 ± 1.05	19.34 ± 3.04	16.65 ± 3.13	
		HeLa	5.34 ± 1.19	7.08 ± 1.02	12.74 ± 2.07	9.01 ± 1.36	
<i>Solidago canadensis</i> L.	flowers	MCF-7	-2.78 ± 2.43	-4.93 ± 1.38	3.43 ± 3.00	21.18 ± 2.20	
		A-431	5.29 ± 1.84	4.88 ± 0.88	19.41 ± 3.29	20.50 ± 3.34	
		HeLa	12.80 ± 2.08	14.63 ± 1.26	-0.89 ± 1.58	-2.49 ± 1.39	
	leaves	MCF-7	-2.45 ± 2.34	-3.83 ± 1.58	13.57 ± 3.04	14.22 ± 2.35	
		A-431	5.66 ± 3.78	10.04 ± 2.72	27.91 ± 1.90	14.71 ± 3.89	
		HeLa	36.29 ± 0.76	20.09 ± 2.16	4.24 ± 3.27	11.59 ± 1.91	
	roots	MCF-7	10.36 ± 2.62	27.56 ± 3.07	2.87 ± 0.84	12.55 ± 1.60	
		A-431	8.02 ± 2.24	23.59 ± 2.40	8.86 ± 1.13	3.13 ± 1.92	
		HeLa	11.07 ± 2.78	13.89 ± 2.10	9.86 ± 3.00	16.64 ± 1.85	
	<i>Solidago virga-aurea</i> L.	leaves	MCF-7	6.47 ± 5.73	21.71 ± 2.62	10.50 ± 2.33	4.11 ± 4.69
			A-431	7.50 ± 2.32	21.25 ± 6.90	20.32 ± 1.85	5.47 ± 1.11
			HeLa	14.01 ± 1.60	25.78 ± 1.14	5.50 ± 1.83	7.58 ± 1.86
roots		MCF-7	18.18 ± 1.48	0.76 ± 3.36	12.65 ± 1.31	20.19 ± 1.49	
		A-431	26.15 ± 2.10	11.62 ± 4.25	11.05 ± 2.07	11.99 ± 2.48	
		HeLa	3.36 ± 2.64	4.10 ± 3.20	11.48 ± 1.73	4.24 ± 1.73	
flowers		MCF-7	12.10 ± 1.80	18.23 ± 4.88	35.07 ± 1.08	27.34 ± 0.77	
		A-431	6.69 ± 1.87	12.25 ± 4.46	31.73 ± 1.51	15.06 ± 4.76	
		HeLa	7.66 ± 1.73	82.52 ± 0.80	13.88 ± 1.33	5.32 ± 1.52	
ANTHEMIDEAE							
<i>Achillea collina</i> L.	flowers	MCF-7	4.73 ± 1.63	30.75 ± 1.81	14.87 ± 1.96	3.32 ± 3.20	
		A-431	6.05 ± 2.77	13.11 ± 4.77	2.42 ± 2.62	2.34 ± 4.46	
		HeLa	9.67 ± 2.16	82.79 ± 0.68	3.27 ± 0.93	5.80 ± 1.92	
	leaves	MCF-7	8.53 ± 1.13	38.87 ± 3.46	14.36 ± 1.43	5.79 ± 2.27	
		A-431	14.44 ± 1.61	18.89 ± 1.17	29.54 ± 1.00	14.36 ± 3.61	
		HeLa	40.26 ± 0.91	22.98 ± 2.49	22.21 ± 2.36	7.60 ± 1.89	
	roots	MCF-7	16.89 ± 2.63	35.20 ± 1.55	12.98 ± 3.95	12.14 ± 2.76	
		A-431	20.93 ± 2.13	24.65 ± 2.99	6.94 ± 1.97	2.84 ± 2.83	
		HeLa	12.64 ± 1.83	88.91 ± 0.37	2.33 ± 1.30	4.77 ± 1.02	
	herbs	MCF-7	-1.76 ± 1.61	53.95 ± 3.22	5.83 ± 0.76	2.56 ± 1.95	
		A-431	15.54 ± 1.15	21.38 ± 1.42	17.75 ± 1.55	13.20 ± 1.89	

Annex 1. (continued)			n-hexane	CHCl ₃	MeOH-H ₂ O 1:1	H ₂ O
<i>Anthemis ruthenica</i> M. BIEB.	herbs	HeLa	7.67 ± 2.54	76.28 ± 1.25	6.54 ± 2.70	8.52 ± 2.43
		MCF-7	31.60 ± 2.45	74.73 ± 2.89	2.33 ± 2.38	4.75 ± 6.25
		A-431	29.90 ± 3.61	79.49 ± 1.42	11.58 ± 7.47	6.99 ± 6.64
<i>Anthemis tinctoria</i> L.	herbs	HeLa	14.66 ± 2.21	15.62 ± 1.28	2.98 ± 1.85	-7.08 ± 2.42
		MCF-7	-12.76 ± 4.82	-12.68 ± 3.53	0.13 ± 2.94	2.73 ± 4.23
		A-431	7.14 ± 3.27	12.01 ± 1.97	9.50 ± 1.67	5.35 ± 3.24
<i>Artemisia asiatica</i> NAKAI EX PAMP.	flowers	HeLa	14.33 ± 1.30	68.60 ± 1.55	5.80 ± 1.28	-3.51 ± 1.45
		MCF-7	37.25 ± 2.24	75.70 ± 1.98	9.90 ± 2.03	-0.42 ± 1.84
		A-431	10.81 ± 3.13	75.26 ± 1.31	11.69 ± 0.80	-1.85 ± 6.77
	leaves	HeLa	10.57 ± 2.00	33.55 ± 0.98	11.06 ± 1.75	2.95 ± 1.55
		MCF-7	28.68 ± 0.53	57.92 ± 1.83	13.14 ± 1.13	13.20 ± 2.09
		A-431	19.59 ± 3.36	72.46 ± 1.41	-6.42 ± 2.76	-3.12 ± 4.58
stems	HeLa	9.56 ± 1.45	28.28 ± 3.34	-3.37 ± 0.99	-5.35 ± 0.61	
	MCF-7	9.83 ± 5.23	17.93 ± 2.96	-12.50 ± 3.49	4.92 ± 2.21	
	A-431	-15.13 ± 2.20	40.29 ± 1.94	4.64 ± 1.48	-10.93 ± 3.43	
<i>Artemisia campestris</i> L.	herbs	HeLa	26.81 ± 2.43	28.84 ± 0.77	2.59 ± 2.58	-13.24 ± 3.48
		MCF-7	8.72 ± 2.08	7.76 ± 2.65	15.76 ± 2.34	-6.61 ± 8.21
		A-431	13.69 ± 2.10	19.15 ± 2.47	9.48 ± 1.96	10.57 ± 1.55
<i>Artemisia dracunculus</i> L.	leaves	HeLa	5.80 ± 1.39	32.97 ± 0.73	14.02 ± 2.22	10.68 ± 1.01
		MCF-7	15.00 ± 2.68	16.80 ± 1.09	1.04 ± 3.04	4.37 ± 1.76
		A-431	14.43 ± 3.06	14.58 ± 3.42	10.62 ± 4.13	9.27 ± 3.18
<i>Artemisia japonica</i> THUNB.	flowers	HeLa	3.14 ± 2.96	58.33 ± 3.69	6.98 ± 1.50	1.30 ± 2.61
		MCF-7	-0.59 ± 2.40	76.92 ± 1.44	2.21 ± 1.10	-7.19 ± 2.40
		A-431	11.98 ± 2.80	85.19 ± 0.63	7.87 ± 2.73	5.31 ± 1.66
	leaves	HeLa	4.41 ± 1.56	46.17 ± 2.46	1.13 ± 2.64	3.12 ± 3.16
		MCF-7	-8.20 ± 2.09	72.58 ± 1.24	4.22 ± 5.03	-1.50 ± 3.14
		A-431	6.16 ± 2.07	76.09 ± 1.53	11.05 ± 2.67	3.05 ± 4.24
stems	HeLa	3.99 ± 0.81	17.32 ± 2.94	-1.05 ± 2.35	6.57 ± 1.91	
	MCF-7	0.67 ± 0.53	14.24 ± 0.98	4.54 ± 2.00	12.76 ± 1.43	
	A-431	11.14 ± 1.18	20.87 ± 2.98	-2.14 ± 2.41	1.59 ± 1.78	
<i>Artemisia messerschmidiana</i> BESS.	flowers	HeLa	1.02 ± 1.41	8.66 ± 1.82	-2.24 ± 1.72	-1.70 ± 1.81
		MCF-7	8.27 ± 1.84	20.27 ± 1.66	12.72 ± 1.47	0.74 ± 3.49
		A-431	-6.98 ± 3.09	18.11 ± 2.80	13.93 ± 2.57	-1.31 ± 1.55
	leaves	HeLa	4.63 ± 2.16	5.02 ± 0.88	5.69 ± 1.27	5.99 ± 2.12
		MCF-7	15.61 ± 3.19	7.85 ± 1.17	8.99 ± 2.82	-2.95 ± 1.83
		A-431	33.94 ± 0.89	10.74 ± 1.89	-2.46 ± 1.54	-4.66 ± 0.77
stems	HeLa	6.46 ± 1.60	21.86 ± 2.22	0.51 ± 1.94	4.64 ± 1.96	
	MCF-7	4.37 ± 1.31	32.74 ± 2.39	12.36 ± 1.57	1.28 ± 1.38	
	A-431	3.22 ± 2.87	18.26 ± 1.99	-1.41 ± 2.87	-5.05 ± 3.62	
<i>Artemisia vulgaris</i> L.	leaves	HeLa	0.94 ± 1.88	15.22 ± 0.63	-2.95 ± 1.00	-5.22 ± 2.77
		MCF-7	16.54 ± 1.18	26.74 ± 2.87	3.78 ± 3.44	3.38 ± 1.74
		A-431	0.02 ± 2.80	16.65 ± 4.63	1.32 ± 2.51	-4.09 ± 0.58
	flowers	HeLa	3.53 ± 3.55	15.06 ± 2.42	5.29 ± 2.72	-0.27 ± 2.81
		MCF-7	8.14 ± 1.21	26.06 ± 2.84	13.39 ± 3.03	13.58 ± 3.35
		A-431	-3.12 ± 0.91	15.60 ± 1.58	-2.67 ± 1.08	1.02 ± 1.06
roots	HeLa	9.98 ± 2.72	19.54 ± 2.87	5.21 ± 1.92	4.48 ± 1.73	
	MCF-7	20.54 ± 3.40	19.58 ± 2.72	13.62 ± 3.87	23.39 ± 1.38	
	A-431	1.41 ± 1.58	17.28 ± 0.97	-0.09 ± 0.23	11.31 ± 3.89	
<i>Matricaria chamomilla</i> L.	flowers	HeLa	16.51 ± 3.73	9.50 ± 1.99	10.38 ± 1.52	5.80 ± 2.35
		MCF-7	-1.26 ± 3.17	-1.80 ± 1.51	11.59 ± 1.82	1.91 ± 3.82
		A-431	3.62 ± 2.10	15.14 ± 3.51	19.48 ± 3.35	7.63 ± 2.01
<i>Tripleurospermum inodorum</i> (L.) SCH. BIP.	leaves	HeLa	29.98 ± 2.01	30.95 ± 2.24	24.55 ± 2.13	9.65 ± 5.19
		MCF-7	8.83 ± 1.00	29.63 ± 3.14	4.71 ± 2.43	2.50 ± 3.15
		A-431	15.13 ± 1.75	27.75 ± 2.12	4.51 ± 3.47	-3.93 ± 5.22
	fruits	HeLa	32.35 ± 1.36	45.34 ± 2.56	31.73 ± 2.16	10.96 ± 2.49
		MCF-7	23.04 ± 2.22	22.79 ± 3.10	9.54 ± 1.85	-3.00 ± 2.63
		A-431	20.67 ± 2.12	27.39 ± 2.95	10.24 ± 1.28	1.80 ± 2.88
roots	HeLa	17.54 ± 2.97	16.10 ± 3.41	12.14 ± 3.16	-3.05 ± 1.71	
	MCF-7	14.22 ± 3.54	16.10 ± 2.15	9.31 ± 2.43	9.01 ± 4.46	
	A-431	16.97 ± 2.39	8.26 ± 3.64	3.39 ± 2.94	-13.43 ± 2.45	
INULEAE						
<i>Filago arvensis</i> L.	herbs	HeLa	20.66 ± 5.06	17.81 ± 1.15	11.98 ± 0.63	-1.46 ± 2.13
		MCF-7	7.08 ± 3.85	-1.40 ± 2.74	6.60 ± 4.51	-14.76 ± 3.24
		A-431	7.41 ± 2.32	8.64 ± 3.47	3.26 ± 2.30	-9.75 ± 6.15
	roots	HeLa	18.04 ± 1.73	26.95 ± 1.95	25.38 ± 1.56	5.60 ± 1.32
		MCF-7	-16.36 ± 4.51	10.59 ± 1.95	23.36 ± 0.97	6.91 ± 5.33
<i>Inula ensifolia</i> L.	fruits/ flowers	A-431	-8.15 ± 6.34	22.07 ± 1.97	26.56 ± 1.82	-5.72 ± 5.72
		HeLa	6.38 ± 1.59	58.96 ± 1.15	1.42 ± 1.25	1.71 ± 1.58
		MCF-7	2.09 ± 1.26	25.69 ± 2.45	5.66 ± 1.04	6.45 ± 2.28
A-431	4.08 ± 1.20	27.86 ± 1.07	1.27 ± 1.12	-0.46 ± 2.01		

Annex 1. (continued)			<i>n</i> -hexane	CHCl ₃	MeOH-H ₂ O 1:1	H ₂ O	
<i>Inula ensifolia</i> L.	flowers	HeLa	-0.22 ± 2.38	12.99 ± 1.82	7.32 ± 2.62	12.51 ± 3.58	
		MCF-7	8.62 ± 1.72	19.57 ± 2.81	17.83 ± 3.22	10.50 ± 1.88	
		A-431	5.51 ± 2.57	16.82 ± 1.16	17.33 ± 0.5	-0.49 ± 1.57	
	roots	HeLa	25.56 ± 1.33	27.86 ± 1.56	1.45 ± 3.45	2.98 ± 1.93	
		MCF-7	35.43 ± 5.73	17.12 ± 4.69	9.04 ± 1.97	7.94 ± 2.12	
		A-431	12.52 ± 1.88	22.15 ± 1.46	-5.65 ± 4.45	-0.55 ± 3.46	
	<i>Telekia speciosa</i> BAUMG.	leaves	HeLa	13.93 ± 2.17	46.66 ± 1.14	5.52 ± 2.09	-2.00 ± 1.26
			MCF-7	20.11 ± 3.04	68.46 ± 1.36	17.85 ± 4.08	2.39 ± 3.29
			A-431	9.90 ± 1.40	82.69 ± 0.32	12.75 ± 3.54	3.21 ± 3.61
flowers		HeLa	3.49 ± 1.49	38.90 ± 1.22	2.71 ± 2.32	-3.10 ± 1.59	
		MCF-7	10.61 ± 9.11	68.38 ± 1.24	13.61 ± 1.90	1.82 ± 7.22	
		A-431	9.34 ± 4.17	81.38 ± 1.29	16.10 ± 1.74	2.75 ± 4.99	
stems		HeLa	19.11 ± 1.03	19.33 ± 2.26	2.61 ± 1.60	-0.46 ± 1.71	
		MCF-7	43.01 ± 1.95	38.73 ± 0.76	12.19 ± 3.90	8.17 ± 2.79	
		A-431	31.50 ± 2.34	34.29 ± 1.87	7.04 ± 1.12	10.79 ± 2.48	
HELANTHAEAE							
<i>Ambrosia artemisiifolia</i> L.	leaves	HeLa	26.24 ± 1.89	36.05 ± 2.02	13.64 ± 3.37	6.06 ± 1.46	
		MCF-7	18.41 ± 2.92	37.46 ± 2.57	3.34 ± 4.05	3.18 ± 2.14	
		A-431	15.86 ± 1.26	52.02 ± 1.09	1.64 ± 2.29	6.09 ± 3.07	
	roots	HeLa	49.09 ± 1.29	12.19 ± 2.22	13.60 ± 3.11	2.98 ± 5.03	
		MCF-7	36.70 ± 0.89	25.63 ± 2.63	18.44 ± 1.33	8.39 ± 1.57	
		A-431	50.69 ± 1.08	23.01 ± 1.33	18.42 ± 2.65	0.81 ± 2.16	
<i>Echinacea purpurea</i> (L.) MÖNCH.	fruits	HeLa	7.20 ± 1.92	14.16 ± 1.54	14.18 ± 2.14	10.98 ± 2.35	
		MCF-7	10.43 ± 1.49	12.00 ± 1.39	19.88 ± 1.57	5.36 ± 1.68	
		A-431	6.30 ± 1.73	9.21 ± 3.48	6.34 ± 1.57	1.18 ± 1.77	
	leaves	HeLa	5.90 ± 2.56	14.62 ± 1.54	8.68 ± 2.55	11.26 ± 1.07	
		MCF-7	11.26 ± 1.96	16.89 ± 1.42	11.13 ± 0.91	7.35 ± 2.53	
		A-431	8.16 ± 3.21	17.20 ± 1.03	6.65 ± 1.99	5.40 ± 1.28	
<i>Galinsoga parviflora</i> CAV.	herbs	HeLa	6.74 ± 2.00	9.24 ± 2.56	22.91 ± 1.81	0.10 ± 3.45	
		MCF-7	19.43 ± 2.47	26.52 ± 0.95	20.19 ± 0.83	-2.39 ± 3.28	
		A-431	-2.41 ± 2.19	11.40 ± 3.70	24.01 ± 1.21	2.25 ± 2.24	
	roots	HeLa	14.43 ± 1.31	12.41 ± 1.87	8.64 ± 3.07	14.43 ± 2.53	
		MCF-7	6.35 ± 1.52	17.51 ± 0.71	11.06 ± 2.32	14.43 ± 0.82	
		A-431	21.58 ± 4.60	27.41 ± 2.80	22.70 ± 3.48	26.05 ± 1.75	
<i>Helianthus annuus</i> L.	leaves	HeLa	8.39 ± 1.99	25.67 ± 1.85	6.60 ± 1.83	0.25 ± 1.84	
		MCF-7	1.31 ± 4.52	9.28 ± 1.48	10.64 ± 2.41	-3.30 ± 4.36	
		A-431	-8.94 ± 2.74	16.87 ± 3.35	-0.67 ± 4.76	-9.76 ± 5.24	
	roots	HeLa	13.21 ± 2.32	57.50 ± 1.09	23.26 ± 1.46	12.83 ± 3.05	
		MCF-7	28.58 ± 3.25	72.33 ± 1.02	36.38 ± 2.38	29.26 ± 2.76	
		A-431	2.40 ± 2.86	63.85 ± 1.68	22.41 ± 1.48	7.86 ± 2.07	
<i>Xanthium italicum</i> MORETTI	flowers /buds	HeLa	24.12 ± 1.89	91.12 ± 0.42	35.17 ± 1.59	4.42 ± 1.63	
		MCF-7	50.45 ± 4.52	84.30 ± 0.88	27.12 ± 1.96	9.31 ± 1.26	
		A-431	62.36 ± 2.21	89.34 ± 0.94	61.98 ± 0.38	12.09 ± 4.58	
	leaves	HeLa	12.07 ± 1.39	83.03 ± 0.95	14.95 ± 2.70	-4.70 ± 1.39	
		MCF-7	5.32 ± 3.34	83.43 ± 1.53	-1.95 ± 3.13	15.05 ± 1.54	
		A-431	27.23 ± 3.72	91.37 ± 0.45	8.54 ± 3.16	4.86 ± 1.31	
	roots	HeLa	43.26 ± 1.22	64.12 ± 1.04	7.05 ± 1.70	0.51 ± 1.50	
		MCF-7	46.55 ± 1.51	76.65 ± 5.0	7.31 ± 2.02	0.53 ± 3.35	
		A-431	67.42 ± 0.93	86.13 ± 0.74	7.83 ± 1.03	1.39 ± 2.12	