

Supporting Information

Temporal Gene Expression Profiling of Maslinic Acid-Treated Raji Cells

Lau Wai Meng ², Menaga Subramaniam^{1,2}, Hoe Han Goh³, **Lim Yang Mooi**^{1,2*}

Affiliation

¹Department of Pre-Clinical Science, Faculty of Medicine and Health Sciences, Universiti Tunku Abdul Rahman, Lot PT21144, Jalan Sungai Long, Bandar Sungai Long, 43000 Kajang, Selangor, Malaysia

²Centre for Cancer Research, Faculty of Medicine and Health Sciences, Universiti Tunku Abdul Rahman, PT21144, Jalan Sungai Long, Bandar Sungai Long, 43000 Kajang, Selangor, Malaysia

³Institute of Systems Biology, Universiti Kebangsaan Malaysia, UKM Bangi, Bangi, Malaysia

Correspondence

Prof. Dr. Lim Yang Mooi, Department of Pre-Clinical Science, Faculty of Medicine and Health Sciences, Universiti Tunku Abdul Rahman, Lot PT21144, Jalan Sungai Long, Bandar Sungai Long, 43000 Kajang, Malaysia. E-mail: ymlim@utar.edu.my Phone: +60390194722 ex178 Fax: +603 90191959

Table 1S. Gene transcripts with a p-value of less than 0.05 and expression fold-change of ± 2.0 across at least 2 time-points

Transcripts Cluster Id	p-value	Log of fold-change				
		4 hours	8 hours	12 hours	24 hours	48 hours
7959354	1.3E-02	-1.3058	-1.5890	-1.4932	-1.1168	-1.2231
8014891	7.2E-05	-1.3041	-2.2011	-2.2267	-1.3784	-1.3169
8122334	8.4E-04	-1.0944	-2.1491	-2.2478	-2.3706	-2.1508
8104901	2.8E-05	-1.0246	-1.3624	-1.8409	-1.2404	-1.8301
7909350	1.7E-04	-1.0208	-2.2835	-2.5744	-2.2862	-2.5478
7930927	3.1E-04	1.0152	1.4537	1.3382	1.2873	1.8381
7951077	9.6E-06	1.0247	1.6745	1.8100	1.3330	1.3423
7988581	4.4E-04	1.0276	1.1814	1.1702	1.1542	1.3929
7908409	7.1E-04	1.0323	1.1883	1.4319	1.4055	2.1068
7908614	7.6E-07	1.0407	1.4709	1.3987	1.0743	1.0535
7927146	4.6E-04	1.0640	1.4369	1.4719	1.0494	1.0874
8088820	1.1E-03	1.0687	1.3088	1.3846	1.1836	1.4865
8040340	3.2E-05	1.1019	1.4510	2.1477	2.7407	2.4759
8179263	1.1E-05	1.1702	1.4956	1.8275	2.7438	1.8850
8177983	1.2E-05	1.1734	1.4809	1.8229	2.7416	1.8893
7996954	2.3E-05	1.1761	1.2036	1.2570	1.3251	1.4174
8118142	1.1E-05	1.1815	1.4929	1.8318	2.7499	1.8965
8147344	1.9E-08	1.1963	1.5263	1.7797	1.9956	2.1561
7915160	8.9E-05	1.2059	1.3131	1.2327	1.2788	1.4119
7904018	7.6E-05	1.2155	2.0938	2.0671	2.1181	1.8214
8024485	5.6E-02	1.2196	1.2194	1.1745	1.5050	1.1696
7962884	1.0E-02	1.2730	1.0901	1.4004	1.4768	1.7706
8166289	8.9E-04	1.3350	1.4318	1.3612	1.3056	1.2537
8031047	2.1E-03	1.3559	1.1944	1.0338	1.2570	1.4851
8052689	3.1E-03	1.4091	1.3231	1.2464	1.4387	1.4678
7907160	1.2E-05	1.5475	2.0191	2.3011	1.6774	1.8729
7906613	6.3E-05	1.6275	2.4251	1.9345	1.9318	2.9300
8083569	3.2E-05	1.6301	1.5426	1.5670	1.5690	1.5113
8116649	1.4E-05	1.6857	2.8524	3.1246	3.0647	2.5039
8116653	1.4E-05	1.6900	2.8487	3.1243	3.0666	2.5036
7933872	2.5E-04	2.0475	2.0246	2.5526	3.5423	2.8864
7960865	1.5E-05	2.1015	2.8649	3.2381	4.0654	4.0060
8015031	1.1E-03	3.0579	3.5709	3.0130	2.8479	3.1962
8108370	1.3E-06	3.6314	3.5677	3.6132	3.8088	2.9792
7927062	1.9E-05	-1.2275	-1.3620	-1.5099	-1.0674	-0.9927
8041168	4.0E-02	-1.0202	-1.1212	-1.0073	-1.2688	-0.6720
7953878	1.6E-07	-1.0930	-2.2492	-2.7129	-1.7638	-0.9400
7908125	1.7E-04	1.3396	1.5180	1.3334	1.1425	0.8911
7918955	9.2E-08	1.0480	1.4020	1.2554	1.0474	0.9836
8117106	2.6E-08	-1.1088	-1.7253	-1.9472	-1.6856	-1.9446
8100943	7.7E-07	-0.7896	-2.1996	-2.6043	-2.6395	-2.5490
8175393	5.3E-07	-0.3747	-0.8577	-1.3280	-1.2895	-2.2477
7982663	6.1E-10	-0.0854	-0.5596	-0.4801	-1.6292	-2.9746
8018860	3.2E-07	-0.6689	-0.9257	-0.7807	-2.2421	-3.2001
8078248	2.0E-08	-0.2464	-0.4250	-0.8206	-1.3919	-1.6425
8083941	2.5E-10	-0.0268	-0.0519	-0.1832	-1.1355	-1.9876
8014974	3.9E-08	-0.1200	-0.1248	-0.1948	-0.9552	-2.0126
8057744	2.3E-09	0.5770	1.1830	1.7541	4.9104	4.8168
7944560	2.4E-08	0.6334	1.5229	2.0268	2.2044	2.1930
8129677	9.3E-07	0.8994	1.2333	1.2141	2.0323	2.3453
7965040	1.1E-07	0.1908	0.7834	1.1813	1.9549	2.0961
8058295	1.5E-06	0.1931	0.9557	1.0421	1.0998	1.0722
8004184	3.7E-07	0.0716	-0.1633	0.1002	3.5089	4.5170
7926239	1.6E-06	0.0000	0.1916	0.5041	1.6559	2.0566
8051501	7.8E-07	0.1352	0.2378	0.3089	1.7894	1.9253
8061579	1.5E-09	0.0053	-0.1161	-0.2207	-0.9256	-1.8360
8014391	1.7E-06	-0.0370	-0.1682	0.5560	2.7342	2.6611
8014414	1.7E-06	-0.0348	-0.1665	0.5567	2.7352	2.6623
8019731	1.7E-06	-0.0367	-0.1686	0.5562	2.7349	2.6616
8048940	4.6E-07	0.4762	0.8810	0.9652	2.7610	2.6477
8094743	3.2E-07	-1.4982	-2.2729	-2.3872	-1.1540	-0.3131
7925257	8.4E-07	0.4533	1.0860	1.2175	1.3674	1.8281

7935270	5.4E-07	-0.4626	-1.8367	-2.1661	-2.1519	-2.4368
8167185	1.5E-07	0.1246	0.8698	2.1489	4.7711	3.6999
7902541	2.5E-08	0.0208	0.0704	-0.0347	4.3151	5.8758
7929438	1.6E-07	0.1358	-0.1307	-0.4583	-1.4382	-1.9724
7948656	1.4E-07	0.2203	0.6867	0.7639	1.5482	1.2536
8014391	1.7E-06	-0.0370	-0.1682	0.5560	2.7342	2.6611
8048940	4.6E-07	0.4762	0.8810	0.9652	2.7610	2.6477
8078248	2.0E-08	-0.2464	-0.4250	-0.8206	-1.3919	-1.6425
8160559	7.8E-07	0.3502	0.2017	0.5550	4.5512	4.5115
8047419	9.4E-05	0.4994	0.5532	0.4628	1.2683	0.9513
8148317	5.2E-05	-1.0751	-1.1458	-1.0459	-0.6846	-0.3767
8122202	2.6E-06	-0.5721	-1.2001	-1.0681	-1.6209	-1.3945
7957759	1.1E-05	1.4381	1.4266	1.3408	0.6126	0.4537
7998978	6.5E-06	1.6112	1.5211	1.0900	0.8915	0.7052
7939738	1.3E-03	-0.5987	-1.0704	-0.6623	-1.0457	-1.6239
8071768	1.1E-02	-0.7561	-1.3202	-1.1868	-1.1355	-1.4359
8102362	1.0E-04	-0.6179	-1.1522	-1.2796	-1.1553	-1.4037
8046488	4.2E-07	-0.8482	-1.1170	-1.2454	-1.4781	-2.0935
8141395	1.0E-03	-0.6054	-1.0230	-1.2083	-1.7418	-2.2386
8105111	6.4E-07	-0.7561	-1.4009	-1.4345	-1.2262	-1.0881
8102560	5.3E-09	-0.6326	-1.0105	-1.4780	-2.4141	-2.9416
7927710	3.3E-06	-0.6579	-1.0414	-1.2905	-2.0695	-2.3778
7953333	9.1E-05	-0.4264	-1.2110	-1.3532	-1.4325	-1.7086
8152133	5.0E-08	-0.6149	-1.0429	-1.2498	-1.4270	-1.7042
8097657	3.2E-06	-0.7701	-1.4898	-1.4043	-1.4733	-1.6915
8083000	2.3E-04	-0.7048	-1.4841	-1.5934	-1.4323	-1.4975
7987405	1.1E-03	-0.6739	-1.1130	-1.2172	-1.0905	-1.4739
8071768	1.1E-02	-0.7561	-1.3202	-1.1868	-1.1355	-1.4359
7987165	1.1E-05	-0.5586	-1.3212	-1.6631	-1.2515	-1.3582
8012257	2.5E-04	-0.3209	-1.0548	-1.5501	-1.2541	-1.2732
8130185	2.2E-03	-0.5732	-1.2544	-1.6972	-1.4133	-1.1080
8100943	7.7E-07	-0.7896	-2.1996	-2.6043	-2.6395	-2.5490
7953218	6.9E-09	-0.1282	-0.6652	-1.1388	-2.2978	-2.8934
8019842	1.8E-06	-0.4108	-0.9736	-1.5348	-2.4004	-2.8411
7989647	1.2E-06	-0.5421	-0.6348	-1.0929	-2.4489	-3.3447
7916727	1.6E-05	-0.7448	-0.8144	-1.0525	-1.6815	-2.3720
7921637	3.1E-08	-0.8731	-1.9191	-2.2623	-2.0049	-2.1046
8123819	3.5E-03	-0.5122	-0.7708	-1.1236	-1.0902	-1.2413
8036525	2.7E-04	-0.3360	-0.7325	-1.1346	-1.2427	-1.1127
7897561	9.6E-06	-0.0470	0.8005	1.2882	1.7365	1.1904
8072876	2.9E-06	-0.0404	0.2994	1.0236	3.0259	2.9024
8101126	2.3E-06	0.0634	-1.3244	-1.4286	3.9037	3.9387
7926368	7.4E-04	0.7245	1.4675	1.7079	2.0223	1.4529
7996022	1.1E-01	0.3144	1.1714	1.7169	2.2878	1.1461
8123609	9.3E-02	0.8245	1.2819	1.1952	1.3382	1.1472
7923453	1.9E-04	0.5649	1.0428	1.1688	1.6382	1.3068
7930413	3.7E-06	0.7292	1.0066	1.1215	1.5888	1.3924
8116559	1.1E-03	0.9232	1.4542	1.3360	1.8057	1.5229
8044919	2.2E-06	0.3288	1.1377	1.3967	1.7546	1.6271
7964460	1.5E-02	0.9288	1.1293	1.2847	2.1859	2.1261
8110569	2.1E-05	0.7429	1.7574	2.2124	2.6944	2.1557
8135069	5.7E-06	0.8109	1.9774	2.6069	3.1446	2.5471
7912145	5.4E-07	0.4058	1.4296	2.2460	3.7392	2.6622
8077376	3.7E-04	0.3261	0.7817	1.1708	1.2969	1.3849
7965040	1.1E-07	0.1908	0.7834	1.1813	1.9549	2.0961
7919095	1.7E-02	0.5472	0.7950	1.3635	1.3585	1.1819
8149733	3.1E-05	0.5844	0.7879	1.0616	1.4252	1.3752
7983969	6.4E-06	-0.0818	-0.1278	-0.4203	-1.6110	-3.0430
7968563	2.2E-06	-0.1887	-0.3334	-0.5442	-1.7486	-2.8154
7960340	2.2E-06	-0.3346	-0.5547	-0.9081	-1.7462	-2.5179
7942527	6.6E-06	-0.7878	-0.8187	-0.9609	-1.6748	-2.3180
8138489	2.5E-04	-0.5877	-0.8200	-0.7526	-1.6352	-1.7467
8097356	8.0E-09	-0.2087	-0.4348	-0.9856	-2.0110	-3.0093
7974404	1.9E-04	-0.1351	-0.2770	-0.3828	-1.1574	-2.7052
7909708	3.0E-05	-0.3078	-0.6166	-0.5842	-1.4681	-2.6783
8120838	1.1E-04	-0.3693	-0.3979	-0.5638	-1.3481	-2.5169
7945014	8.4E-09	-0.2863	-0.5425	-0.7455	-1.5079	-2.3527
7994109	2.3E-06	-0.2800	-0.6633	-0.6049	-1.1056	-2.1957
7982792	3.3E-06	-0.3081	-0.6401	-0.9347	-1.5927	-1.9324
8171381	5.8E-06	-0.3928	-0.0629	-0.4779	-1.1136	-1.5555

8063043	2.8E-04	-0.1485	-0.4331	-0.6164	-1.0519	-1.5000
8029136	6.2E-02	-0.2409	-0.5663	-0.7593	-1.0778	-1.4669
7978846	4.7E-04	-0.4617	-0.7168	-0.9420	-1.0728	-1.4569
7905826	4.7E-05	-0.1989	-0.9011	-0.7596	-1.5847	-1.3971
7904314	2.7E-03	-0.4720	-0.7221	-0.8652	-1.0632	-1.2611
7913869	6.6E-05	-0.2462	-0.2837	-0.4686	-1.1504	-1.2601
7914141	8.4E-05	-0.6874	-0.5029	-0.8277	-1.4739	-1.2224
8160647	8.7E-03	-0.0801	-0.3196	-0.5229	-1.0897	-1.1529
8020468	5.1E-06	-0.4603	-0.7175	-0.7287	-1.0698	-1.0756
8035847	4.5E-03	-0.3073	-0.3577	-0.9279	-1.1483	-1.0459
7938035	3.0E-05	-0.3846	-0.5040	-0.7468	1.6783	2.0330
8118571	4.6E-04	-0.7844	-0.6670	-0.4139	1.0334	1.0870
8179495	4.5E-04	-0.7886	-0.6745	-0.4126	1.0275	1.1026
8178211	4.7E-04	-0.7833	-0.6738	-0.4138	1.0326	1.1101
8073088	2.7E-06	-0.2517	-0.2827	-0.2744	1.5398	1.4836
8006608	4.0E-05	-0.4166	-0.9899	-0.7334	1.4491	1.6544
8040080	2.2E-04	-0.1108	-0.0303	-0.0535	2.7034	4.2293
8101118	7.4E-03	-0.1000	-0.0470	-0.0831	3.6285	4.4566
8137414	8.3E-05	-0.4487	-0.0904	0.2398	1.0235	1.1958
8048898	3.3E-06	-0.1869	-0.2439	0.1397	2.1292	2.5616
8014316	6.0E-04	-0.0030	-0.0580	0.3247	3.0167	4.1850
7982757	2.5E-04	-0.0711	0.0243	-0.1257	-1.2739	-2.0315
7902553	5.1E-08	-0.0258	0.0434	-0.0059	3.6807	4.8355
7914851	3.4E-05	-0.1926	0.0850	0.0024	-1.2289	-1.8157
7973433	1.5E-01	-0.0093	0.2999	0.9845	1.6366	2.2219
8091327	3.0E-05	-0.0502	0.1542	0.0491	2.1661	2.4684
8081386	6.8E-05	-0.0228	0.1523	0.2221	1.1597	1.3134
8101131	9.7E-03	-0.1079	0.0206	0.2323	3.1879	3.8600
8148124	2.3E-09	0.0343	-0.0835	-0.6884	-1.2661	-1.9857
7929438	1.6E-07	0.1358	-0.1307	-0.4583	-1.4382	-1.9724
8086880	4.5E-04	0.2335	-0.5099	-0.7519	-1.3873	-1.6928
7985873	1.2E-05	0.2024	0.1896	-0.1111	-1.0797	-1.4970
8092169	5.8E-03	0.1635	-0.2166	-0.3660	2.9506	3.1990
8177976	6.7E-05	0.3543	-0.0101	0.4042	1.8946	1.3662
8178295	4.5E-02	0.0684	-0.0687	0.1051	1.6729	2.3329
7953569	1.1E-03	0.2017	-0.0378	0.3622	1.4918	1.5155
7920271	3.8E-04	0.0508	-0.0175	0.2102	1.2349	1.5461
8014369	4.8E-06	0.0367	-0.0488	0.6844	2.8586	2.8367
8118137	4.3E-05	0.2684	0.0420	0.4467	2.3565	1.8168
8179258	5.1E-05	0.2825	0.0656	0.3956	2.3719	2.0088
7903358	5.0E-03	0.1045	0.1254	0.2023	1.6297	1.5749
7922773	3.5E-05	0.1438	0.3096	0.4302	1.6123	1.6356
8116622	2.4E-04	0.0332	0.2748	0.5444	1.8443	1.7699
7978644	5.7E-04	0.6572	0.2889	0.4716	1.8995	1.7948
8115734	6.7E-04	0.6595	0.8401	0.9098	2.1513	1.2897
8154233	4.5E-02	0.6771	0.7004	0.6198	2.1822	1.7307
7964119	4.4E-05	0.0047	0.2892	0.4322	2.1291	1.9509
7999468	2.0E-03	0.4840	0.6380	0.6285	1.1480	1.0314
8066716	3.2E-03	0.0589	0.6935	0.6090	1.0152	1.0473
8163825	3.6E-03	0.1210	0.2844	0.3680	1.2282	1.0476
7931810	1.7E-02	0.6179	0.4469	0.5975	1.2260	1.0688
8173444	3.5E-05	0.1361	0.6713	0.6594	1.0618	1.0900
8163618	6.9E-03	0.0143	0.0071	0.2527	1.5253	1.1707
8111698	1.7E-05	0.3743	0.1784	0.2183	1.0595	1.1894
8073960	2.8E-06	0.6792	0.7168	0.8172	1.0011	1.1913
8047161	1.9E-03	0.4887	0.6874	0.9083	1.3071	1.2201
8040103	4.2E-03	0.9506	0.5167	0.5343	1.0992	1.2226
8099029	1.6E-04	0.1866	0.5576	0.6388	1.2549	1.2254
8162533	4.0E-06	0.6405	0.6591	0.7492	1.1070	1.4383
8016847	6.2E-05	0.5138	0.5693	0.4973	1.5193	1.4589
7961120	6.2E-04	0.1075	0.3364	0.2512	1.0602	1.4654
8143341	3.8E-03	0.1520	0.3638	0.7632	1.4274	1.5904
8010260	7.3E-05	-0.4369	-0.5994	-0.5477	-1.1931	-1.1506
8102076	8.9E-04	-0.1075	0.0088	-0.0282	-1.1754	-2.3668
8111569	5.4E-01	-0.0933	-0.0602	-0.1014	1.3025	1.6979
8125512	1.2E-03	-0.0335	-0.0644	-0.0932	1.8937	1.7966
8178867	1.2E-03	-0.0327	-0.0613	-0.0922	1.8954	1.7979
8180061	1.2E-03	-0.0217	-0.0481	-0.0836	1.9030	1.8033
8046003	1.1E-04	-0.5374	-0.6312	-0.8169	1.0170	1.8508
7971296	7.0E-06	-0.2254	-0.3446	-0.5256	1.8982	2.0192

7940775	1.9E-04	-0.2085	-0.1531	-0.1280	1.5722	2.0983
8082100	2.0E-05	-0.1200	-0.1152	-0.1459	1.2821	2.1934
7951309	5.8E-11	-0.0232	-0.0235	-0.0085	1.0924	2.9775
8119198	8.5E-05	-0.3189	-0.1644	0.2226	1.2999	1.0369
8179034	2.2E-02	-0.1698	-0.0104	0.4040	1.0378	1.1037
7965060	2.4E-04	-0.4008	-0.0263	0.1993	1.3060	1.3033
7988563	3.5E-04	-0.1252	-0.0605	0.0352	1.1704	1.4071
8074606	1.2E-04	-0.0551	-0.1230	0.0565	1.5577	1.6978
8037205	6.4E-03	-0.0712	-0.0195	0.1247	1.0682	1.8249
7917532	2.3E-04	-0.0987	-0.0491	0.0881	2.0673	2.1699
8083743	3.0E-03	-0.0019	0.1864	0.5856	2.5479	1.6525
7914127	3.9E-04	-0.1029	0.0722	0.2357	2.1761	1.6958
7917576	1.1E-02	-0.0211	0.0066	0.0914	2.8431	4.4275
7982358	5.0E-08	0.0347	-0.0810	-0.3445	-1.4192	-2.7213
8013671	4.2E-07	0.0464	-0.0358	-0.0492	-1.4025	-2.2332
8104912	4.4E-07	0.0354	-0.1062	-0.2882	-1.3982	-2.1453
8103932	1.3E-04	0.0204	-0.0945	-0.4171	-1.0561	-1.9539
7958031	1.9E-04	0.1743	-0.1394	-0.3473	-1.0038	-1.8529
8151101	7.4E-09	0.0937	-0.0936	-0.5343	-1.5735	-1.7343
8035838	1.0E-04	0.4494	-0.1077	-0.7194	-1.6190	-1.7113
8102389	2.4E-05	0.2472	-0.2178	-0.4182	-1.0954	-1.6266
8120165	2.1E-04	0.4004	-0.1436	-0.5620	-1.2988	-1.4357
8102371	1.7E-05	0.1130	-0.1995	-0.5059	-1.0244	-1.4182
7978776	2.5E-02	0.0459	-0.5736	-0.4709	-1.1511	-1.3870
7901867	1.4E-06	0.1495	-0.3217	-0.5716	-1.1122	-1.3128
8046804	1.4E-06	0.0192	-0.3162	-0.5070	-1.0594	-1.3042
8123137	4.7E-03	0.0103	-0.1827	-0.3822	-1.1474	-1.2023
8163525	3.5E-05	0.0549	-0.5609	-0.8025	-1.0873	-1.1718
8064976	2.0E-04	0.0344	-0.1311	-0.0897	-1.1618	-1.0675
7999718	2.6E-05	0.0289	-0.3265	-0.6793	-1.0752	-1.0248
8011826	3.4E-03	0.1168	-0.2651	-0.3068	1.0876	1.8939
7929047	1.6E-04	0.0036	-0.1258	-0.0003	3.7496	3.5451
8008784	1.2E-07	0.1242	0.0549	-0.1821	-1.4174	-2.7367
7923189	2.1E-06	0.0967	0.0109	-0.2010	-1.1178	-2.6361
7910997	1.2E-05	0.0775	0.0999	-0.0224	-1.8816	-2.5930
7929258	4.0E-05	0.2811	0.1049	-0.0788	-1.0131	-2.2810
8089372	1.9E-06	0.0145	0.0311	-0.2547	-1.5365	-2.2742
8001133	6.7E-07	0.0734	0.1351	-0.1002	-1.3222	-1.8874
8006187	1.2E-07	0.5923	0.2080	-0.1707	-1.2172	-1.7817
7995354	3.4E-05	0.6465	0.1397	-0.1939	-1.0835	-1.7375
7997381	1.1E-05	0.0939	0.0636	-0.2518	-1.2509	-1.6512
8056285	4.9E-05	0.4528	0.1604	-0.0770	1.8989	2.1223
7937020	5.9E-08	0.1690	0.1347	0.0963	-1.0333	-2.3606
7929334	1.8E-05	0.0927	0.0972	0.0529	-1.1317	-2.0828
8054702	6.8E-05	0.0860	0.2614	0.0286	-1.1841	-1.8107
8145418	5.1E-11	0.5089	0.3107	0.2824	-1.0661	-1.7816
8173506	5.8E-08	0.2024	0.2933	0.0503	-1.0179	-1.5038
7929072	9.1E-06	0.0809	0.1931	0.1831	2.0147	2.2350
7961075	6.1E-02	0.9506	0.5217	0.5811	2.1929	2.2412
8156688	2.9E-08	0.2838	0.9377	0.9840	2.4730	2.2851
8024527	6.7E-04	0.0677	0.1313	0.2998	1.3035	2.3039
8122986	2.0E-03	0.1504	0.3928	0.8283	2.2106	2.3182
7896817	8.3E-04	0.1083	0.1488	0.2863	2.1557	2.3315
7905067	8.6E-06	0.2485	0.5715	0.7220	1.5669	2.4948
7919627	9.0E-06	0.2480	0.5840	0.7385	1.5832	2.5203
8098259	2.2E-02	0.0160	0.0173	0.0168	1.0010	2.5385
8077441	2.6E-06	0.5846	0.4991	0.9215	2.1368	2.5774
8010454	2.6E-05	0.1457	0.1667	0.3398	2.9566	2.7676
8010426	1.1E-05	0.1156	0.1086	0.4583	3.0391	2.8513
7917516	1.0E-02	0.1576	0.1143	0.3142	2.2440	2.8773
8106354	5.0E-04	-0.1735	-0.1387	0.2568	1.2751	1.0889
8090018	7.0E-08	-0.3819	-0.5793	-0.5672	2.2550	2.6734
8035304	5.0E-06	-0.2576	-0.0291	-0.1040	1.3081	1.4479
8082075	1.9E-05	-0.5318	-0.6867	-0.6275	1.7127	1.9197
8094259	2.6E-04	-0.0310	-0.2063	-0.1479	1.1654	1.2485
8049540	5.6E-03	1.4532	1.1483	0.3686	-0.0958	-0.4480
8092541	2.6E-05	-0.0521	0.1496	0.3392	1.0890	1.0720
8177725	2.0E-02	-0.1750	0.0193	0.3903	1.0285	1.1426
8179041	3.1E-02	-0.0981	0.0750	0.3855	1.0034	1.1470
8178489	3.2E-02	-0.0368	0.0983	0.4024	1.0669	1.1708

7961546	1.4E-02	-0.0370	0.0855	0.2723	1.0097	1.2004
7927799	2.1E-05	-0.4884	0.3632	0.4497	1.0421	1.2471
7967117	2.5E-02	-0.0160	0.0062	0.0908	1.6632	1.2522
7943293	3.6E-05	-0.3395	0.6692	0.9063	1.8450	1.2707
7946228	1.8E-03	-0.0295	0.4341	0.6597	1.5913	1.2945
7995838	3.2E-02	-0.0134	0.2064	0.2110	1.1172	1.3382
8117800	5.4E-02	-0.0158	0.1317	0.5173	1.2687	1.3814
8127094	4.4E-04	-0.0695	0.2242	0.4019	1.6286	1.4057
8073081	3.4E-05	-0.0594	0.1985	0.0198	1.9055	1.6740
8100827	2.7E-05	-0.2040	-0.3024	-0.7354	-1.2457	-2.7869
8039928	1.2E-05	-0.6055	-0.8819	-0.9554	-1.8224	-2.7226
7904452	9.4E-06	-0.5582	-0.8841	-0.9286	-1.8077	-2.7210
7909146	1.5E-05	-0.5763	-0.8754	-0.9384	-1.8355	-2.7152
8129763	1.2E-06	-0.2339	-0.3514	-0.7042	-1.7385	-2.6832
7971653	1.3E-04	-0.2381	-0.2537	-0.3967	-1.2156	-2.6681
8003844	1.3E-05	-0.3600	-0.4704	-0.9474	-1.4564	-1.9211
7971866	3.9E-06	-0.2477	-0.0444	-0.0149	-1.0296	-1.8431
7982712	2.6E-05	-0.6502	-0.4994	-0.6882	-1.1738	-1.8046
7991735	2.7E-02	-0.6202	-0.5451	-0.5561	-1.1131	-1.7870
7917976	4.1E-05	-0.0212	-0.2955	-0.4695	-1.1107	-1.7773
8096753	1.5E-04	-0.4163	-0.6062	-0.9630	-1.1427	-1.7621
7979281	3.7E-04	-0.3843	-0.3458	-0.3617	-1.2299	-1.7501
8112327	1.2E-07	-0.0456	-0.5212	-0.9169	-1.8829	-1.7357
7926896	1.9E-07	-0.0415	-0.5148	-0.8958	-1.7974	-1.6869
7914878	1.2E-04	-0.5379	-0.1464	-0.2946	-1.1531	-1.6380
8056728	7.8E-07	-0.2380	-0.5520	-0.5851	-1.1446	-1.5563
8008682	1.8E-04	-0.4511	-0.7633	-0.9788	-1.2090	-1.5498
7898549	4.7E-04	-0.4561	-0.6096	-0.9745	-1.1283	-1.4875
7953697	2.8E-04	-0.0688	-0.3126	-0.6605	-1.3303	-1.4719
7986246	2.4E-03	-0.3922	-0.8498	-0.6860	-1.0240	-1.4444
8121087	1.1E-04	-0.3766	-0.7350	-0.7695	-1.1302	-1.3793
8131583	2.4E-03	-0.1859	-0.4828	-0.8530	-1.0182	-1.3576
8111960	5.4E-04	-0.7786	-0.6019	-0.9598	-1.1178	-1.3502
7922391	5.0E-05	-0.4656	-0.3035	-0.6965	-1.1288	-1.3314
8001496	1.4E-05	-0.3639	-0.2321	-0.4370	-1.0059	-1.3117
7914334	1.3E-02	-0.2595	-0.7539	-0.4001	-1.1587	-1.2933
7982290	2.5E-03	-0.1234	-0.3807	-0.4369	-1.1979	-1.2581
7965867	2.4E-05	-0.4920	-0.4520	-0.4600	-1.1052	-1.2507
7971027	8.0E-04	-0.5658	-0.5749	-0.7116	-1.0431	-1.2420
8021716	4.2E-05	-0.7768	-0.8705	-0.8369	-1.0102	-1.2338
8042079	4.2E-04	-0.5153	-0.9295	-0.8250	-1.1534	-1.2195
7951038	1.9E-04	-0.7809	-0.7045	-0.8456	-1.1151	-1.2181
7938364	2.2E-01	-0.1751	-0.5614	-0.8023	-1.3184	-1.2154
8124527	9.9E-02	-0.4607	-0.2879	-0.7512	-1.0810	-1.2019
8171013	5.6E-05	-0.5906	-0.7253	-0.8894	-1.0229	-1.1961
7926807	1.0E-02	-0.4912	-0.8482	-0.9164	-1.0535	-1.1910
8061019	2.5E-06	-0.4444	-0.7413	-0.9934	-1.0951	-1.1471
8099850	1.5E-05	-0.0877	-0.3858	-0.8843	-1.2378	-1.1369
7948908	1.5E-02	-0.6466	-0.0922	-0.3473	-1.0193	-1.1368
7936706	4.4E-08	-0.1447	-0.4535	-0.5883	-1.0644	-1.1242
8053834	1.5E-01	-0.3137	-0.7970	-0.6492	-1.0584	-1.1070
8100758	6.1E-02	-0.0090	-0.8180	-0.8153	-1.5822	-1.0554
8052934	1.5E-03	-0.2354	-0.8174	-0.8703	-1.0168	-1.0125
7942204	1.1E-04	0.1250	0.3919	0.7077	1.0288	1.0019
8123637	2.9E-04	0.0741	0.2129	0.4673	1.1229	1.0108
8059413	3.6E-02	0.5928	0.6970	0.7475	1.2598	1.0324
7918900	4.3E-03	0.1458	0.1229	0.3135	1.0029	1.0558
7910385	7.5E-06	0.0062	0.4080	0.4579	1.1692	1.0664
8047596	5.3E-03	0.1850	0.5887	0.8507	1.0161	1.0701
8038515	4.0E-06	0.0360	0.5690	0.7669	1.4747	1.0850
7915787	1.7E-04	0.0092	0.3278	0.7065	1.2739	1.1168
8114354	4.0E-03	0.0279	0.7146	0.7540	1.7013	1.1351
8166243	6.3E-04	0.0556	0.1232	0.4428	1.3533	1.1492
8066939	6.0E-03	0.6982	0.6704	0.6392	1.2155	1.1493
8029701	6.6E-06	0.2541	0.3101	0.6422	1.2233	1.1525
7899394	6.2E-06	0.3587	0.9023	0.7673	1.6621	1.1967
8001317	2.1E-05	0.1768	0.6070	0.6118	1.4722	1.2257
8097435	2.5E-02	0.5239	0.4680	0.3736	1.2228	1.2341
8048976	2.5E-04	0.3857	0.2919	0.3728	1.5283	1.2565
7925929	1.9E-04	0.0890	0.2769	0.5007	1.4334	1.2663

8159265	1.1E-05	0.0672	0.0618	0.6080	1.5295	1.2800
8042283	1.4E-02	0.6610	0.7760	0.8784	1.1739	1.2924
8069178	2.1E-06	0.0389	0.3871	0.4912	1.1137	1.2967
8054611	2.6E-05	0.0380	0.8068	0.9542	1.3074	1.3531
8099912	4.8E-04	0.0779	0.6896	0.8525	1.0270	1.3675
7940160	2.2E-04	0.2420	0.3334	0.2993	1.2408	1.4247
8041197	7.8E-02	0.9283	0.3856	0.3912	1.0118	1.4353
8048926	4.2E-04	0.0558	0.5731	0.6710	1.9243	1.4392
7927964	3.5E-03	0.4660	0.8468	0.9895	1.1139	1.4681
7954711	2.5E-03	0.2215	0.2452	0.2074	1.0889	1.4780
8135033	3.2E-03	0.7477	0.0354	0.1040	1.4224	1.4797
8031573	8.7E-04	0.1282	0.3878	0.6907	1.1169	1.5076
8146921	3.4E-07	0.4490	0.1636	0.3034	1.1561	1.6225
8095376	3.8E-04	0.3422	0.7340	0.9213	2.1244	1.7340
8101304	5.8E-03	0.7822	0.3755	0.2034	1.4548	1.7777
8031570	5.7E-04	0.0586	0.4285	0.7770	1.4287	1.8421
8151816	7.8E-04	0.0539	0.2321	0.2568	1.0906	1.8561
8166469	8.8E-03	0.3193	0.7382	0.9669	1.8070	1.8652
7919584	3.0E-03	0.2228	0.5555	0.3637	1.0290	1.8918
8146550	2.6E-03	0.3112	1.2127	1.1562	1.0945	1.2608
7988767	7.4E-06	-0.0268	0.7143	0.8373	1.7789	1.8999
7931353	2.1E-02	0.2226	0.3274	0.6267	1.6335	1.0803
7958884	2.7E-06	0.3436	0.1191	0.3611	3.0252	3.1611
7958913	8.3E-06	-0.2923	-0.5569	-0.5205	2.3355	2.6608
7969114	5.1E-03	-0.4356	-0.7541	-0.9952	-1.1913	-1.3022
7962375	2.4E-05	0.3797	0.4075	0.4989	1.6074	1.0696
8002303	1.6E-05	-0.0728	-0.0366	0.0168	1.0072	1.1728
8130499	1.1E-02	0.3400	0.7308	0.5968	1.1198	1.0837
8112841	6.9E-05	0.0000	0.5892	0.8374	1.8440	1.5370
8064522	7.6E-02	-0.3826	-0.5959	-0.6937	-1.0315	-1.2642
8108301	5.7E-06	-0.5331	-0.4498	-0.3772	-1.7899	-2.8452
8060997	9.8E-05	-0.0888	0.1512	0.4298	1.4800	2.0497
8058390	5.9E-06	0.0985	0.4260	0.7463	1.0067	1.5974
8068697	3.6E-04	0.0496	-0.0788	0.0266	2.1982	3.6459
8016858	4.7E-03	-1.1003	-1.0080	-0.6962	-0.4191	-0.1438
7896748	3.1E-03	1.3044	1.0423	-0.8509	0.7974	0.5274
7977592	2.2E-01	1.3815	1.4575	0.3419	-0.0230	0.0351
7947040	1.4E-03	1.3844	1.2907	0.9290	0.7165	0.4774
7976571	3.7E-03	1.1213	1.1842	0.9609	0.7005	0.5469
7957043	2.9E-04	1.0857	1.0859	0.8264	0.7405	0.6782
7913558	7.6E-04	1.0704	1.1285	0.9369	0.8582	0.7065
7923905	2.7E-02	1.5843	1.0635	0.7788	0.8587	0.8422
8080911	4.8E-05	1.5139	1.1202	0.8856	0.7245	0.9360
8103563	3.1E-05	-0.0069	0.0943	-0.0054	2.4627	3.7499
8168146	2.5E-06	-0.3069	-0.2440	0.1810	-1.1126	-2.0326
8004184	3.7E-07	0.0716	-0.1633	0.1002	3.5089	4.5170
8071212	2.2E-06	-0.2806	-0.4766	-0.7164	-1.5946	-2.4280
7984364	1.9E-03	0.5789	0.4981	0.7018	1.2807	1.2142
8007071	6.2E-07	0.3963	-0.0006	-0.2723	-1.3028	-1.8880
8102643	1.1E-06	-0.1041	-0.5503	-0.8983	-1.8738	-2.8147
8146357	9.1E-06	-0.4412	-0.6937	-0.8911	-1.7640	-2.4013
8055426	9.1E-05	-0.5240	-0.5102	-0.4988	-1.3217	-1.6694
7916167	1.4E-04	-0.2458	-0.2183	-0.2729	-1.1506	-1.6705
8064844	7.4E-05	0.0286	-0.2010	-0.4219	-1.1210	-1.2408
8066136	6.4E-03	-0.8546	-0.6689	-0.7521	-1.1379	-1.4413
7970317	1.9E-03	-0.0470	-0.3716	-0.6134	-0.7387	-1.0060
7934026	4.6E-08	-0.1630	-0.5439	-0.8065	-2.2116	-2.2377
7941214	6.5E-05	-0.6032	-0.5721	-0.5146	-1.0190	-1.4186
8026051	4.3E-03	-0.7803	-0.9523	-0.6567	-1.0365	-1.5802
7964701	1.3E-03	0.2845	0.8748	0.6638	1.0841	1.1320
7934920	3.2E-07	-0.0923	0.1708	0.4507	1.6222	1.6626
8092348	8.0E-04	0.1012	0.1145	0.2986	1.5632	1.5010
7934196	6.0E-02	0.1825	0.5356	0.8706	1.3777	1.4714
8124901	2.2E-02	0.0120	0.1433	0.4407	1.0353	1.2217
8117890	4.1E-02	0.1295	0.2607	0.5110	1.5758	1.4737
8117760	5.8E-03	0.0510	0.1274	0.1902	1.0194	1.1088
8179019	1.0E-02	0.0445	0.0479	0.1830	1.0048	1.1082
8178884	1.1E-01	0.1474	0.4911	0.6551	1.0410	1.0016
8180022	1.8E-03	0.3382	0.6926	0.6013	1.2090	1.2350
8177732	7.9E-02	0.0258	0.0139	0.4592	1.2359	1.2794

8180086	1.1E-01	0.1390	0.4889	0.6515	1.0350	1.0086
8178826	1.7E-03	0.3053	0.6709	0.5834	1.1825	1.2002
8141374	1.0E-02	0.1232	0.5073	0.9348	1.5623	1.2481
8179103	4.3E-02	0.0841	0.2387	0.5418	1.6101	1.5228
8177717	7.9E-03	0.0617	0.0833	0.2150	1.0911	1.1963
8125537	1.1E-01	0.1545	0.4783	0.6586	1.0147	1.0055
8115831	1.8E-03	0.2932	0.3240	0.5343	1.6569	1.6476
7924450	2.6E-05	0.9002	0.7846	0.8041	1.7533	2.1357
8066074	3.9E-05	-0.5781	-0.3099	-0.4151	-1.0328	-1.3058
8130374	1.0E-02	0.1308	-0.0060	-0.5299	-1.2727	-1.4920
8019857	7.5E-04	-0.2651	-0.5331	-0.7854	-1.5386	-2.4795
7906930	1.6E-05	-0.2141	-0.3995	-0.4531	-1.7089	-2.9839
8149955	1.8E-08	-0.1753	-0.5444	-0.8340	-2.1571	-3.1730
7957032	7.4E-04	-0.7407	-0.9995	-0.9460	-1.3001	-1.1487
8132318	3.1E-04	-0.1132	0.0490	-0.0411	-1.1734	-1.9985
7923086	2.7E-06	-0.1516	-0.1876	-0.2370	-1.4607	-2.7749
8012403	3.9E-03	-0.5308	-0.6330	-0.4819	-1.2707	-1.8029
7960702	2.3E-03	-0.4552	-0.4807	-0.6463	-1.0427	-1.2178
7900167	3.5E-05	-0.1840	-0.4535	-0.5887	-1.2035	-1.7282
8069933	9.0E-04	-0.1285	-0.3911	-0.2521	-1.0361	-1.1232
8152582	2.3E-04	-0.3558	-0.5897	-0.9618	-1.4343	-1.7463
7979307	9.6E-07	-0.3288	-0.2820	-0.2033	-1.1771	-2.9664
8157691	4.1E-05	-0.0498	-0.1881	-0.4346	-1.0929	-1.3532
8017133	1.3E-04	-0.3527	-0.3822	-0.6552	-1.0127	-1.6204
8079237	2.9E-06	-0.1882	-0.4511	-0.7484	-1.8029	-2.5376
7984540	7.9E-07	-0.0942	-0.2144	-0.1937	-1.0971	-1.9581
7959408	3.0E-03	-0.3000	-0.4003	-0.5501	-1.0530	-1.7290
7952830	2.2E-05	-0.1087	-0.3502	-0.3657	-1.0462	-1.7295
8144153	5.8E-09	-0.1403	-0.0939	-0.5170	-1.2100	-2.2732
8085754	6.6E-07	-0.0248	0.2489	0.0674	-1.1690	-2.4620
7982889	1.8E-08	0.2548	0.1575	-0.0589	-1.2559	-2.0685
8156982	1.4E-09	-0.0520	-0.3390	-0.5545	-1.4307	-2.2111
8058695	3.5E-04	-0.3599	-0.5526	-0.8076	-1.0609	-1.4503
8017262	7.0E-05	-0.4118	-0.3423	-0.4052	-1.1479	-1.8306
7986068	2.9E-03	-0.1646	0.0626	-0.0974	-1.1276	-1.4972
7985829	8.9E-09	-0.3625	-0.3675	-0.6344	-1.4034	-2.7018
8085145	7.5E-06	0.4603	0.1479	0.0843	-1.0598	-1.9492
8144036	1.2E-03	-0.5535	-0.4652	-0.6588	-1.2317	-1.2682
8106730	4.7E-03	-0.4594	-0.8369	-0.9762	-1.1779	-1.0680
7968484	1.8E-04	-0.9280	-0.8714	-0.8384	-1.2187	-1.6675
7909568	1.2E-05	-0.0573	-0.1336	-0.3261	-1.2614	-2.2547
8072122	1.7E-05	-0.1621	-0.2966	-0.8405	-1.1333	-1.5865
8103728	1.2E-03	-0.2271	-0.5307	-0.7504	-1.7965	-1.7747
7924712	1.1E-04	-0.5345	-0.6695	-0.8531	-1.4472	-1.7560
7926259	4.7E-06	-0.3441	-0.2507	-0.2599	-1.3426	-2.4210
8098423	1.8E-05	-0.2608	-0.5257	-0.8232	-1.7429	-2.3268
7901123	4.7E-05	0.1102	-0.4236	-0.7933	-1.1210	-1.0788
8089875	3.1E-06	-0.0849	-0.1933	-0.1971	-1.2247	-1.8045
7937915	2.0E-10	-0.1763	-0.3782	-0.6219	-1.6157	-2.7777
8104234	3.0E-06	-0.4078	-0.9077	-0.8340	-1.7628	-2.2134
8130374	1.0E-02	0.1308	-0.0060	-0.5299	-1.2727	-1.4920
7962760	1.1E-04	-0.1248	-0.5159	-0.7473	-1.0162	-1.0619
7974198	4.7E-04	-0.4688	-0.6057	-0.8379	-1.3481	-1.7299
8152041	2.2E-03	0.5747	0.8132	0.7909	1.4089	1.0119
7946089	1.5E-07	0.0431	0.3702	0.6975	2.2034	2.1698
8142886	1.5E-03	0.4967	0.8286	0.9068	1.0467	1.1081
7923426	9.5E-04	-0.6383	-0.6027	-0.5750	-1.1674	-1.8563
7906662	1.1E-04	-0.2330	-0.7572	-0.7309	-1.0635	-1.4296
8027650	4.2E-08	-0.1026	-0.4997	-0.8390	-1.2871	-1.5710
8152668	1.8E-03	-0.0214	-0.0589	-0.2816	-1.2722	-1.4303
7950796	2.7E-02	-0.7563	-0.6377	-0.5519	-1.0165	-1.0747
7961798	4.3E-05	-0.4358	-0.8279	-0.9784	-1.4132	-1.2332
8112376	7.9E-06	-0.5258	-0.4809	-0.9651	-2.1300	-2.7102
8013307	1.3E-02	0.6589	0.2439	0.6158	1.1262	1.1782
7917472	2.7E-03	1.0003	1.0580	0.9451	0.7083	0.4735
8127158	1.7E-05	0.0320	0.4846	0.9523	1.0951	1.0781
8151457	7.4E-05	0.7016	0.7766	0.9229	1.2678	1.6782
8110450	5.8E-05	-0.1675	-0.3450	-0.5151	-1.2152	-1.0354
8129953	2.4E-03	0.4026	0.1840	0.3107	1.3068	1.2541
8114010	6.4E-03	0.2037	0.1738	0.0054	2.1864	1.4469

8103911	2.4E-04	-0.1213	0.1808	0.2233	2.1033	1.9650
7933877	3.9E-03	0.8112	0.8004	0.7984	1.1731	1.1122
8108954	1.8E-03	-0.1685	-0.6758	-0.6186	-1.1231	-1.2604
7930537	4.4E-05	0.5812	0.3044	0.4163	1.0621	1.3844
8062766	1.2E-08	-0.3066	-0.4644	-0.7299	-1.7740	-2.6791
8054664	7.5E-05	-0.4800	-0.7443	-0.9636	-1.3355	-1.2449
8157941	3.1E-02	1.3691	1.1631	0.8526	0.4573	0.6201
8157947	5.1E-02	1.4207	1.2056	0.9166	0.5610	0.7859
8157945	6.8E-02	1.4150	1.0242	0.9144	0.5331	0.5156
8157933	4.1E-02	0.7177	0.7314	0.7902	1.1156	1.0955
8030831	1.7E-02	0.8193	0.5667	0.7619	1.0549	1.2091
8067113	2.3E-06	0.1460	0.4677	0.5355	1.3693	1.8346
7995258	1.2E-02	0.6665	0.6397	0.5497	1.0278	1.0093
8027348	4.1E-03	-0.3937	-0.1616	-0.5273	-1.5537	-1.6085
8066905	5.4E-04	0.5286	0.5808	0.5522	1.7445	1.9012
8019772	4.0E-04	-0.0902	-0.6805	-0.9232	-1.2567	-2.3212
7961208	1.2E-04	-0.6146	-0.7504	-0.9677	-1.2233	-1.3297
8009761	2.3E-02	-0.2883	-0.4149	-0.5282	-1.0513	-1.4765
8115886	2.7E-05	-0.2327	-0.5324	-0.3537	-1.0525	-1.2836
8110408	7.2E-05	-0.2003	-0.5090	-0.3519	-1.0271	-1.1953
8019731	1.7E-06	-0.0367	-0.1686	0.5562	2.7349	2.6616
7916316	9.4E-04	-0.2000	-0.6352	-0.7649	-1.0345	-1.7974

Table 2S. Genes persistently regulated over 48 hours in response to the treatment with maslinic acid

Transcripts Cluster Id	Log of fold-change		
	4 hours	12 hours	48 hours
7908041	1.2	0.1	1.1
7908614	1.4	1.0	1.1
7912145	2.2	0.4	2.7
7918955	1.3	1.0	1.0
7925257	1.2	0.5	1.8
7926239	0.5	0.0	2.1
7929065	0.2	0.0	5.5
7944560	2.0	0.6	2.2
7946089	0.7	0.0	2.2
7948656	0.8	0.2	1.3
7954559	1.3	0.5	0.9
7965040	1.2	0.2	2.1
7980958	1.4	0.4	1.4
7989335	3.3	0.3	3.6
7993126	1.4	0.2	1.1
8004184	0.1	0.1	4.5
8004510	1.4	0.5	2.8
8022531	2.4	0.7	1.6
8043480	1.3	0.4	1.8
8043484	1.3	0.4	1.7
8047538	1.4	0.9	1.6
8047854	1.0	0.9	0.7
8048940	1.0	0.5	2.6
8051501	0.3	0.1	1.9
8053735	1.4	0.4	1.9
8057744	1.8	0.6	4.8
8058295	1.0	0.2	1.1
8059650	1.3	0.5	3.0
8073062	1.5	0.2	3.7
8096301	2.3	0.1	2.8
8097098	1.4	0.4	1.6
8102619	0.8	0.2	0.8
8108370	3.6	3.6	3.0
8122464	1.6	0.2	2.2
8129573	0.1	0.0	1.0

8129677	1.2	0.9	2.3
8134180	0.8	0.3	1.0
8140782	2.2	0.7	2.9
8142345	1.5	0.2	2.0
8146921	0.3	0.4	1.6
8147344	1.8	1.2	2.2
8154836	2.5	0.4	2.9
8156688	1.0	0.3	2.3
8160559	0.6	0.4	4.5
8161563	1.3	0.4	1.7
8161580	1.3	0.4	1.7
8167185	2.1	0.1	3.7
8169519	1.3	0.9	1.2
7899813	-1.0	-0.5	-1.6
7907079	-1.4	-0.7	-1.2
7921637	-2.3	-0.9	-2.1
7926896	-0.9	0.0	-1.7
7933219	-2.1	-0.8	-2.0
7934026	-0.8	-0.2	-2.2
7935270	-2.2	-0.5	-2.4
7936706	-0.6	-0.1	-1.1
7937915	-0.6	-0.2	-2.8
7945014	-0.7	-0.3	-2.4
7953218	-1.1	-0.1	-2.9
7953878	-2.7	-1.1	-0.9
7957737	-1.1	-0.6	-1.6
7959052	-0.4	-0.3	-1.5
7961069	-2.3	-1.2	-2.0
7979307	-0.2	-0.3	-3.0
7982663	-0.5	-0.1	-3.0
7984540	-0.2	-0.1	-2.0
7985829	-0.6	-0.4	-2.7
7988537	-0.6	-0.2	-2.1
7989647	-1.1	-0.5	-3.3
7989834	-1.3	-0.7	-1.3
8014974	-0.2	-0.1	-2.0
8018860	-0.8	-0.7	-3.2
8027650	-0.8	-0.1	-1.6
8046488	-1.2	-0.8	-2.1
8052866	-1.2	-0.4	-1.2
8056572	-0.6	-0.5	-2.1
8056728	-0.6	-0.2	-1.6
8062766	-0.7	-0.3	-2.7
8067167	-0.6	-0.2	-2.5
8074934	-1.2	-0.2	-1.3
8077731	-1.0	-0.5	-2.5
8078248	-0.8	-0.2	-1.6
8083494	-1.3	-0.4	-2.2
8083941	-0.2	0.0	-2.0
8088491	-1.7	-0.3	-2.2
8089478	-2.7	-0.9	-2.3
8094743	-2.4	-1.5	-0.3
8095574	-1.2	-0.4	-2.0
8097356	-1.0	-0.2	-3.0
8100943	-2.6	-0.8	-2.5
8101659	-2.4	-0.5	-3.1
8102560	-1.5	-0.6	-2.9
8102643	-0.9	-0.1	-2.8
8105111	-1.4	-0.8	-1.1
8105828	-0.1	-0.2	-2.7
8112327	-0.9	0.0	-1.7
8112570	-1.0	-0.5	-1.7
8117106	-1.9	-1.1	-1.9
8124307	-1.2	-0.5	-1.0
8128329	-0.5	-0.3	-1.8
8129763	-0.7	-0.2	-2.7
8144153	-0.5	-0.1	-2.3
8149955	-0.8	-0.2	-3.2
8152133	-1.2	-0.6	-1.7
8156982	-0.6	-0.1	-2.2

8171896	-1.1	-1.0	-0.8
8174051	-1.7	-0.7	-1.7
8175177	-1.5	-0.4	-1.7
8175393	-1.3	-0.4	-2.2

Table 3S. The expression level and the biological function of genes involved in the B-cell receptor signaling pathway

Entrez ID	Gene symbol	Gene name	Time interval (Hours)					Biological functions
			4h	8h	12h	24h	48h	
605	BCL7A	B-cell CLL/lymphoma 7A	-2.5	-3.0	-2.8	-2.2	-2.3	Negative regulation of transcription
1380	CR2	Complement component (3d/Epstein Barr virus) receptor 2	-2.0	-4.9	-6.0	-4.9	-5.8	Complement activation, classical pathway
23421	ITGB3BP	integrin beta 3 binding protein (beta3-endonexin)	-1.7	-1.8	-2.1	-3.2	-5.2	Membrane fraction
29760	BLNK	B cell linker	-1.4	-3.6	-4.5	-4.4	-5.4	B cell differentiation
933	CD22	CD22 molecule	-1.3	-1.9	-2.3	-2.1	-1.6	Protein binding
3575	IL7R	Interleukin 7 receptor	-2.0	-2.6	-3.6	-2.4	-3.6	B cell proliferation
973	CD79A	CD79a molecule, immunoglobulin-associated alpha	-1.2	-1.5	-1.7	-2.1	-2.8	B cell activation
5341	PLEK	Pleckstrin	-1.3	-2.7	-2.9	1.2	1.3	Protein kinase C signaling cascade
5777	PTPN6	Protein tyrosine phosphatase, non-receptor type 6	1.2	-1.0	1.3	2.8	2.9	Positive regulation of cell proliferation
5996	RGS1	Regulator of G-protein signaling 1	1.4	1.1	1.1	1.6	4.4	GTPase activator activity
7412	VCAM1	Vascular cell adhesion molecule	1.1	1.1	1.2	3.1	3.0	Cell adhesion
22822	PHLDA1	Pleckstrin homology-like domain, family A, member 1	1.1	1.7	2.3	3.9	4.3	Apoptosis
7431	VIM	Vimentin	1.7	2.8	3.3	4.1	2.7	Protein kinase binding
5997	RGS2	Regulator of G-protein signaling 2	2.0	2.3	2.7	2.6	4.3	GTPase activator activity
10725	NFAT5	Nuclear factor of activated T-cells 5, tonicity-responsive	2.3	2.3	2.4	2.5	2.7	Regulation of transcription, DNA-dependent
3665	IRF7	Interferon regulatory factor 7	1.0	-1.1	1.1	1.0	1.2	DNA binding

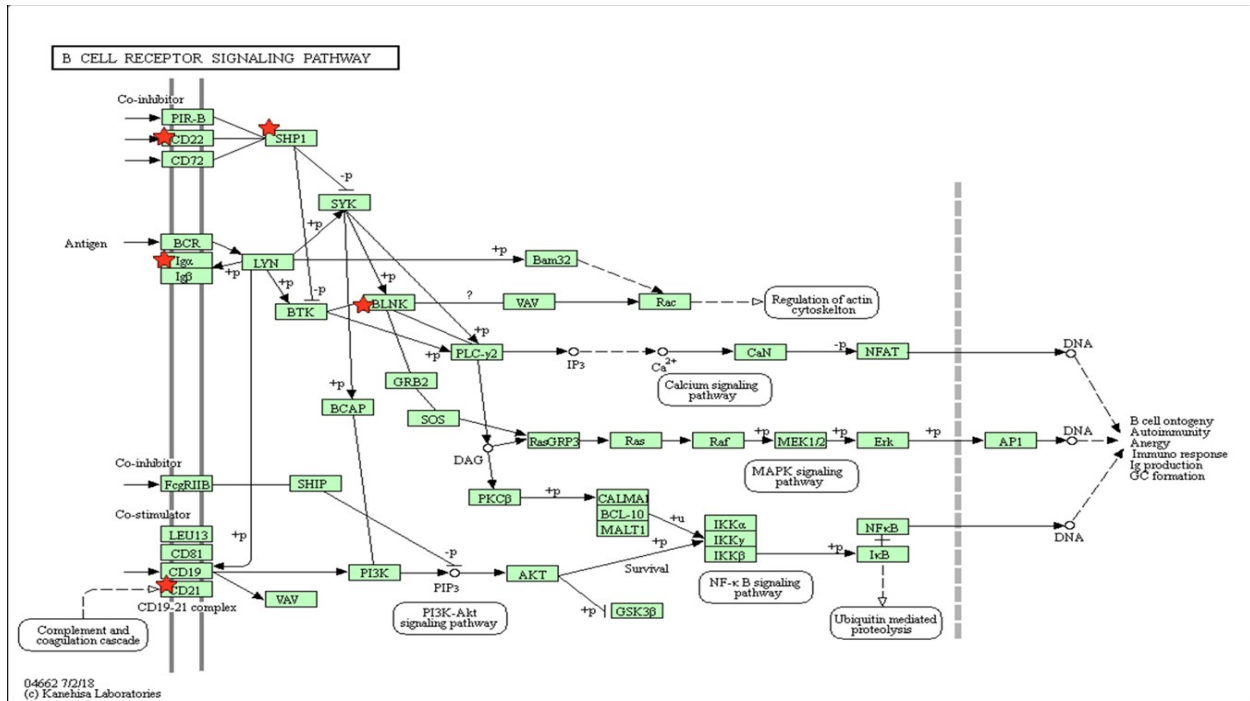


Figure 1: Kyoto Encyclopedia of Genes and Genomes (KEGG) analysis of the B cell receptor signaling pathway. The KEGG pathway analysis of genes identified by gene profiling arrays is shown. Highlighted by the red stars are genes that belong to this known B cell receptor signaling pathway that were also a part of the genes persistently regulated over 48 hours in response to the treatment with maslinic acid. Adapted from DAVID Bioinformatics Resources version 6.8 software.

Table 4S: The expression level and the biological function of genes involved in the cell cycle and DNA replication events

Entrez ID	Gene symbol	Gene name	Time interval (Hours)					Biological functions
			4h	8h	12h	24h	48h	
7027	TFDP1	Transcription factor Dp-1	-1.0	-1.3	-1.5	-1.7	-2.0	Cell cycle
7465	WEE1	WEE1 homolog (S. pombe)	-1.1	-1.5	-1.7	-2.5	-2.3	Cell cycle
4609	MYC	v-mycmyelocytomatosis viral oncogene homolog (avian)	-2.1	-2.2	-2.1	-1.6	-1.3	Cell cycle arrest
5933	RBL1	Retinoblastoma-like 1 (p107)	-1.8	-1.6	-1.7	-2.2	-2.7	Cell cycle
4602	MYB	v-mybmyeloblastosis viral oncogene homolog (avian)	-1.5	-2.3	-2.1	-3.1	-2.6	DNA binding
4175	MCM6	Minichromosome maintenance complex component 6	-1.4	-1.4	-1.4	-2.5	-3.2	DNA binding
55388	MCM10	Minichromosome maintenance complex component 10	-1.3	-1.2	-1.2	-2.5	-5.4	Cell cycle arrest
983	CDK1	Cyclin-dependent kinase 1	-1.6	-2.1	-2.4	-4.2	-5.2	Cell cycle
4085	MAD2L1	MAD2 mitotic arrest deficient-like 1 (yeast)	-1.6	-2.0	-2.8	-5.3	-7.7	Cell cycle
4176	MCM7	Minichromosome maintenance complex component 7	-1.5	-2.0	-2.3	-3.3	-4.7	Cell cycle
4173	MCM4	Minichromosome maintenance complex component 4	-1.4	-1.6	-1.9	-3.4	-5.3	DNA replication checkpoint
7272	TTK	TTK protein kinase	-1.3	-1.3	-1.5	-2.5	-5.7	Cell proliferation
2305	FOXM1	Forkhead box M1	-1.3	-1.5	-1.9	-3.4	-5.7	Cell cycle
1063	CENPF	Centromere protein F	-1.2	-1.5	-1.5	-2.8	-6.4	Mitotic cell cycle
8318	CDC45	Cell division cycle 45 homolog (S. cerevisiae)	-1.2	-1.4	-1.6	-3.0	-5.4	Cell cycle
5347	PLK1	Polo-like kinase 1	-1.2	-1.6	-1.5	-2.2	-4.6	G2/M transition DNA

4998	ORC1	Origin recognition complex, subunit 1	-1.2	-1.2	-1.2	-2.2	-3.2	damage checkpoint Origin recognition complex
1033	CDKN3	Cyclin-dependent kinase inhibitor 3	-1.1	-1.2	-1.3	-2.2	-6.5	Cell cycle arrest
9133	CCNB2	Cyclin B2	-1.1	-1.1	-1.3	-3.1	-8.2	Cell cycle
890	CCNA2	Cyclin A2	-1.1	-1.5	-1.9	-3.7	-7.0	G2/M DNA damage checkpoint
5111	PCNA	Proliferating cell nuclear antigen	1.0	-1.1	-1.3	-2.2	-2.4	DNA binding
993	CDC25A	Cell division cycle 25 homolog A (S. pombe)	1.2	-1.4	-1.7	-2.6	-3.2	Cell cycle
990	CDC6	Cell division cycle 6 homolog (S. cerevisiae)	1.3	-1.0	-1.2	-2.5	-3.7	DNA replication checkpoint
6502	SKP2	S-phase kinase-associated protein 2 (p45)	1.0	-1.1	-1.2	-2.6	-4.4	G1/S transition of mitotic cell cycle
1062	CENPE	Centromere protein E	-1.1	1.0	-1.0	-2.3	-5.2	Mitotic metaphase
57082	CASC5	Cancer susceptibility candidate 5	-1.1	1.0	-1.1	-2.4	-4.1	Spindle assembly check point
699	BUB1	Budding uninhibited by benzimidazoles 1 homolog (yeast)	-1.0	-1.0	1.0	-1.7	-4.7	Cell cycle
22974	TPX2	TPX2, microtubule-associated, homolog (Xenopus laevis)	1.0	-1.1	-1.2	-1.9	-3.6	Cell cycle
9134	CCNE2	Cyclin E2	1.4	1.1	-1.4	-2.6	-2.6	Cell cycle checkpoint
23594	ORC6	Origin recognition complex, subunit 6	1.6	1.1	-1.1	-2.1	-3.3	Origin recognition complex
157313	CDCA2	Cell division cycle associated 2	1.4	1.2	1.2	-2.1	-3.4	Cell cycle
4616	GADD45B	Growth arrest and DNA-damage-inducible, beta	2.3	2.3	2.3	2.8	2.2	Cell cycle
4088	SMAD3	SMAD family member 3	1.5	1.4	1.6	2.4	2.3	Cell cycle arrest
7298	TYMS	Thymidylatesynthetase	-1.3	-2.0	-2.9	-5.3	-7.2	DNA replication
83879	CDCA7	Cell division cycle associated 7	-1.8	-2.2	-2.4	-2.8	-4.3	Cell proliferation
10535	RNASEH2A	ribonuclease H2, subunit A	-1.7	-1.9	-1.6	-2.1	-3.0	DNA replication
6118	RPA2	Replication protein A2	-1.6	-1.4	-1.8	-2.8	-2.3	DNA replication
23649	POLA2	Polymerase (DNA directed), alpha 2 (70kD subunit)	-1.5	-1.5	-1.4	-2.0	-2.7	DNA binding
5026	P2RX5	Purinergic receptor P2X, ligand-gated ion channel, 5	-1.3	-2.3	-2.7	-3.4	-3.5	Positive regulation of calcium-mediated signaling
1163	CKS1B	CDC28 protein kinase regulatory subunit 1B	-1.1	-1.9	-1.7	-3.0	-2.6	Cell proliferation
1763	DNA2	DNA replication helicase 2 homolog (yeast)	-1.1	-1.5	-1.7	-4.6	-4.7	Helicase activity
10733	PLK4	Polo-like kinase 4	-1.2	-1.4	-2.0	-4.0	-8.1	Positive regulation of centriole replication
56924	PAK6	p21 protein (Cdc42/Rac)-activated kinase 6	-1.1	-1.5	-1.4	-3.1	-7.9	Cell proliferation
54107	POLE3	polymerase (DNA directed), epsilon 3 (p17 subunit)	1.0	-1.5	-1.7	-2.1	-2.3	DNA replication
51667	NUB1	Negative regulator of ubiquitin-like proteins 1	-1.4	-1.1	1.2	2.0	2.3	Protein ubiquitination
9966	TNFSF15	TNF ligand	1.0	1.0	1.2	2.9	2.3	Tumor necrosis factor receptor binding
9516	LITAF	Lipopolysaccharide-induced TNF factor	1.4	1.6	1.5	2.2	2.0	Apoptosis
3638	INSIG1	Insulin induced gene 1	1.9	2.3	2.7	2.8	1.8	Cell proliferation
3662	IRF4	Interferon regulatory factor 4	1.9	2.7	2.5	3.5	2.9	Regulation of transcription, DNA-dependent

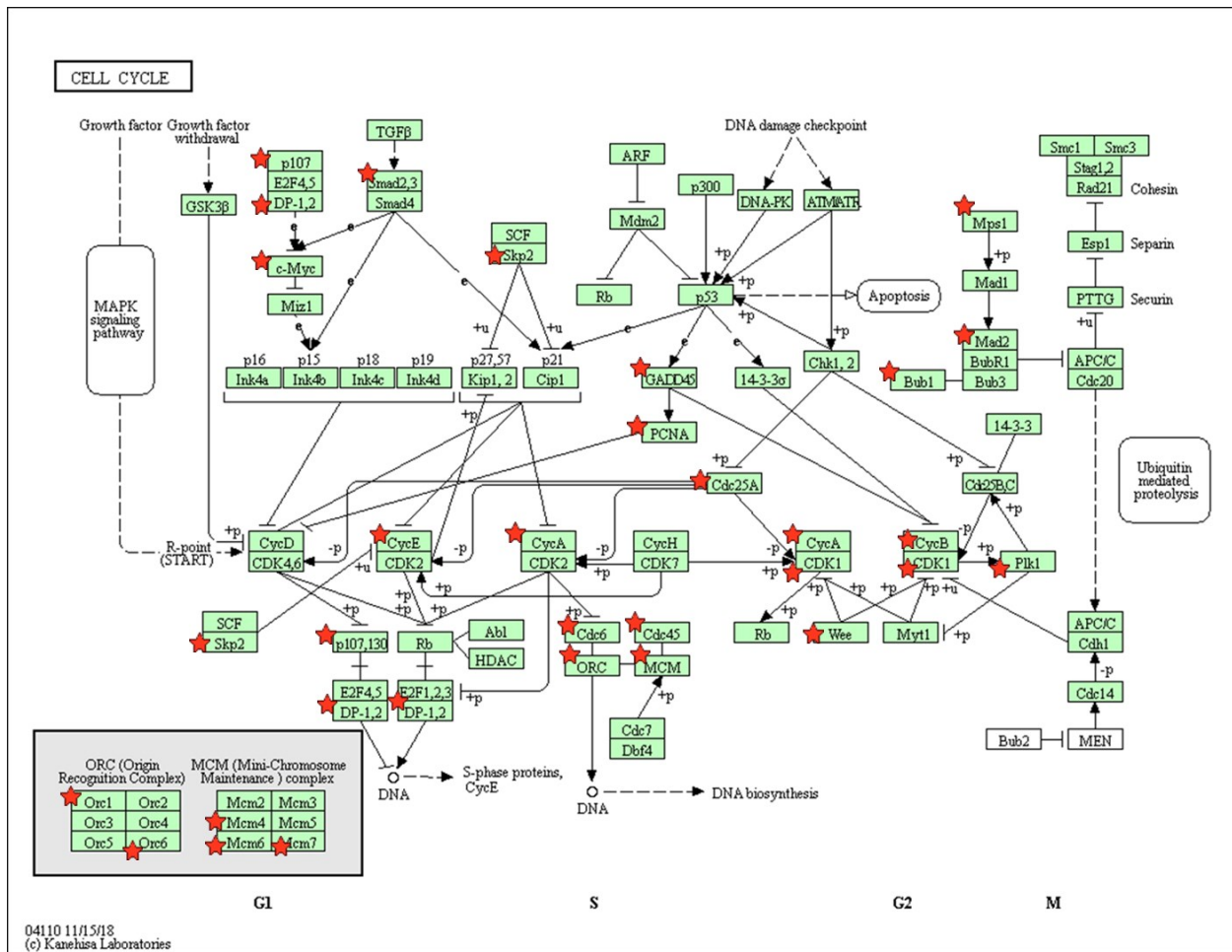


Figure 2: Kyoto Encyclopedia of Genes and Genomes (KEGG) analysis of the cell cycle pathway. The KEGG pathway analysis of genes identified by gene profiling arrays is shown. Highlighted by the red stars are genes that belong to this known cell cycle pathway that were also a part of the genes persistently regulated over 48 hours in response to the treatment with maslinic acid. Adapted from DAVID Bioinformatics Resources version 6.8 software.

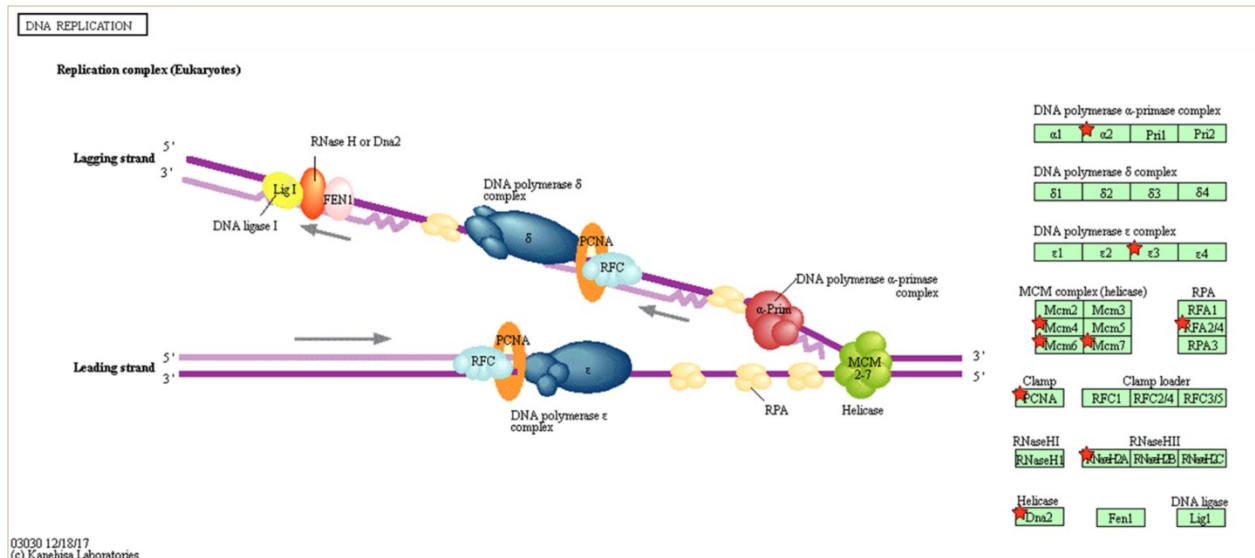


Figure 3: Kyoto Encyclopedia of Genes and Genomes (KEGG) analysis of the DNA replication pathway. The KEGG pathway analysis of genes identified by gene profiling arrays is shown. Highlighted by the red stars are genes that belong to this known DNA replication pathway that were also a part of the genes persistently regulated over 48 hours in response to the treatment with maslinic acid. Adapted from DAVID Bioinformatics Resources version 6.8 software.

Table 5S: The expression level and the biological functions of genes involved in the MHC1 antigen presentation and processing pathway

Entrez ID	Gene symbol	Gene name	Time interval (Hours)					Biological functions
			4h	8h	12h	24h	48h	
4033	LRMP	Lymphoid-restricted membrane protein	-1.3	-3.6	-4.9	-3.6	-2.5	Endoplasmic reticulum
3105	HLA-A	Major histocompatibility complex, class I, A	-1.1	1.1	1.3	2.0	2.2	MHC class I receptor activity
3106	HLA-B	Major histocompatibility complex, class I, B	-1.0	1.1	1.4	2.4	2.6	MHC class I receptor activity
3107	HLA-C	Major histocompatibility complex, class I, C	-1.0	1.1	1.3	2.1	2.3	MHC class I receptor activity
3135	HLA-G	Major histocompatibility complex, class I, G	-1.1	1.0	1.3	2.0	2.2	MHC class I receptor activity
5698	PSMB9	Proteasome	-1.7	-1.6	-1.3	2.0	2.1	Proteasome complex
6890	TAP1	Transporter 1, ATP-binding cassette, sub-family B (MDR/TAP)	-1.0	-1.0	-1.1	3.7	3.5	Intracellular transport of viral proteins in host cell
10537	UBD	Ubiquitin D	1.0	-1.0	1.1	3.2	5.0	Protein ubiquitination
3134	HLA-F	Major histocompatibility complex, class I, F	1.0	1.1	1.1	2.0	2.2	MHC class I receptor activity
3133	HLA-E	Major histocompatibility complex, class I, E	1.1	1.2	1.4	3.0	2.8	MHC class I receptor activity

3108	HLA-DMA	Major histocompatibility complex, class II, DM alpha	1.1	1.4	1.6	2.0	2.0	MHC class II protein complex
3119	HLA-DQB1	Major histocompatibility complex, class II, DQ beta 1	1.2	1.6	1.5	2.3	2.3	Antigen processing and presentation of peptide
334	APLP2	Amyloid beta (A4) precursor-like protein 2	1.4	2.0	2.8	2.4	1.7	Serine-type endopeptidase inhibitor activity

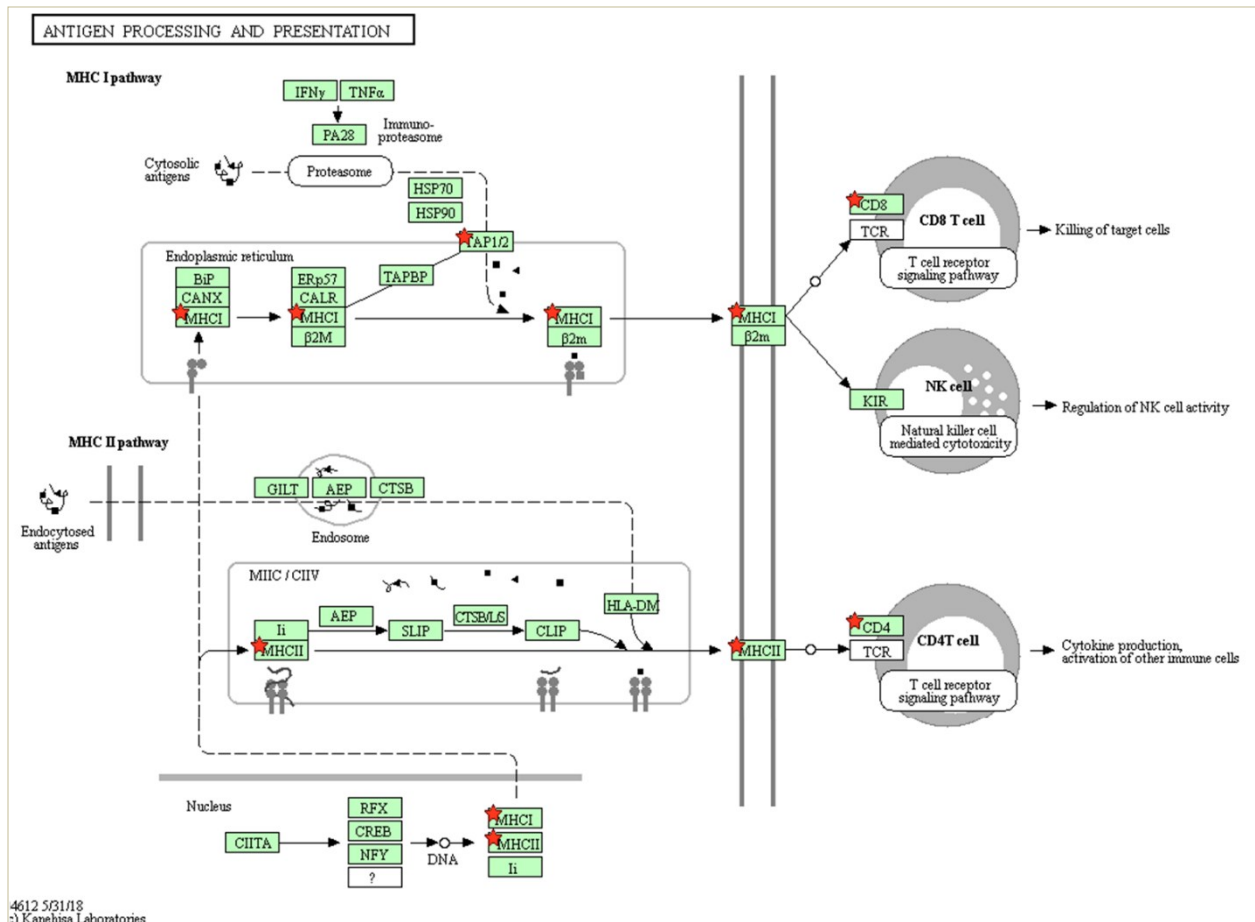


Figure 4: Kyoto Encyclopedia of Genes and Genomes (KEGG) analysis of the MHC1 antigen presentation and processing pathway. The KEGG pathway analysis of genes identified by gene profiling arrays is shown. Highlighted by the red stars are genes that belong to this known MHC1 antigen presentation and processing pathway that were also a part of the genes persistently regulated over 48 hours in response to the treatment with maslinic acid. Adapted from DAVID Bioinformatics Resources version 6.8 software.

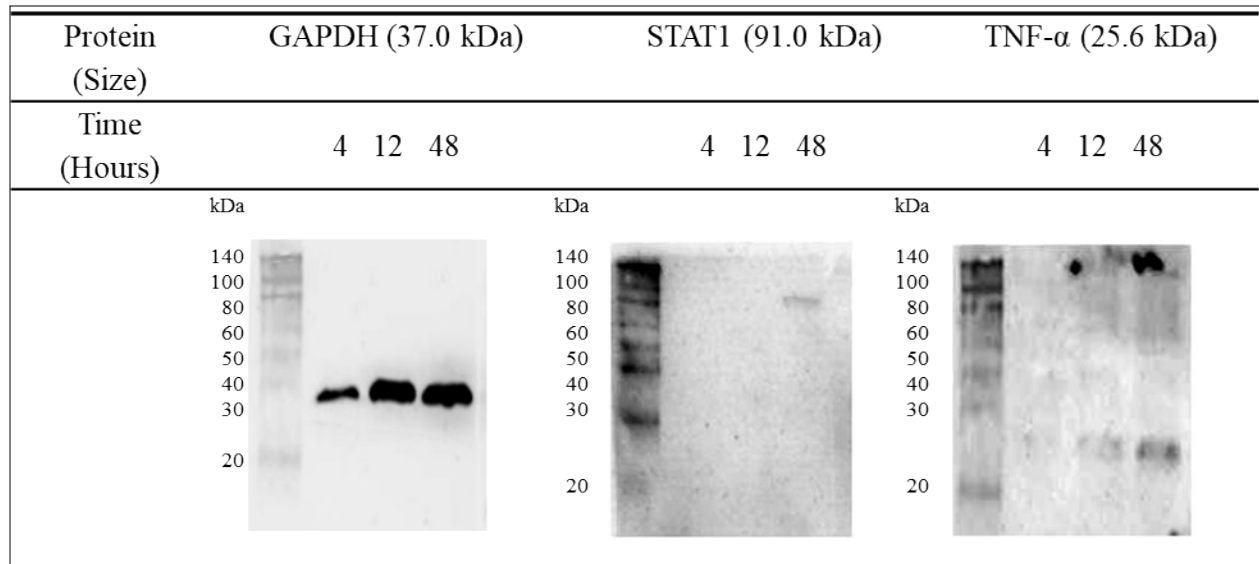


Figure 5: Western blot assay on key regulatory proteins STAT1 and TNF- α

Table 6S: Genes regulated by maslinic acid

Entrez ID	Gene name	Gene symbol	Time-point (H)					Biological functions
			4	8	12	24	48	
11184	Mitogen-activated protein kinase kinasekinasekinase 1	<i>MAP4K1</i>						Activation of MAPKKK activity
573	BCL2-associated athanogene	<i>BAG1</i>						Anti-apoptosis
55197	Fas apoptotic inhibitory molecule	<i>FAIM</i>						Apoptosis
973	CD79a molecule, immunoglobulin-associated alpha	<i>CD79A</i>						B-cell activation
931	Membrane-spanning 4-domains, subfamily A, member 1	<i>MS4A1</i>						B-cell activation
29760	B cell linker	<i>BLNK</i>						B cell differentiation
332	Baculoviral IAP repeat-containing 5	<i>BIRC5</i>						Cell apoptosis activity
983	Cyclin-dependent kinase 1	<i>CDK1</i>						Cell cycle
4085	MAD2 mitotic arrest deficient-like 1 (yeast)	<i>MAD2L1</i>						Cell cycle
4176	Minichromosome maintenance complex component 7	<i>MCM7</i>						Cell cycle
5933	Retinoblastoma-like 1 (p107)	<i>RBL1</i>						Cell cycle
2305	Forkhead box M1	<i>FOXM1</i>						Cell cycle
8318	Cell division cycle 45 homolog (S. cerevisiae)	<i>CDC45</i>						Cell cycle
9133	Cyclin B2	<i>CCNB2</i>						Cell cycle
7027	Transcription factor Dp-1	<i>TFDP1</i>						Cell cycle
7465	WEE1 homolog (S. pombe)	<i>WEE1</i>						Cell cycle
4609	v-mycmyelocytomatosis viral oncogene homolog (avian)	<i>MYC</i>						Cell cycle arrest
55388	Minichromosome maintenance complex component 10	<i>MCM10</i>						Cell cycle arrest
1033	Cyclin-dependent kinase inhibitor 3	<i>CDKN3</i>						Cell cycle arrest
83879	Cell division cycle associated 7	<i>CDC47</i>						Cell proliferation
7272	TTK protein kinase	<i>TTK</i>						Cell proliferation
56924	p21 protein (Cdc42/Rac)-activated kinase 6	<i>PAK6</i>						Cell proliferation
1163	CDC28 protein kinase regulatory subunit 1B	<i>CKS1B</i>						Cell proliferation
1380	Complement component (3d/Epstein Barr virus) receptor 2	<i>CR2</i>						Complement activation, classical pathway
23649	Polymerase (DNA directed), alpha 2 (70kD subunit)	<i>POLA2</i>						DNA binding
4175	Minichromosome maintenance complex component 6	<i>MCM6</i>						DNA binding
4602	v-mybmyeloblastosis viral oncogene homolog (avian)	<i>MYB</i>						DNA binding
5983	Replication factor C (activator 1) 3	<i>RFC3</i>						DNA clamp loader activity
1111	CHK1 checkpoint homolog (S. pombe)	<i>CHEK1</i>						DNA damage checkpoint
1643	Damage-specific DNA binding protein 2	<i>DDB2</i>						DNA repair
5932	Retinoblastoma binding protein 8	<i>RBBP8</i>						DNA repair
50484	Ribonucleotidoreductase M2 B (TP53 inducible)	<i>RRM2B</i>						DNA repair
6118	Replication protein A2	<i>RPA2</i>						DNA replication
10535	Ribonuclease H2, subunit A	<i>RNASEH2A</i>						DNA replication
7298	Thymidylatesynthetase	<i>TYMS</i>						DNA replication
4173	Minichromosome maintenance complex component 4	<i>MCM4</i>						DNA replication checkpoint
10714	Polymerase (DNA-directed), delta 3, accessory subunit	<i>POLD3</i>						DNA-directed DNA polymerase activity
5427	Polymerase (DNA directed), epsilon 2 (p59 subunit)	<i>POLE2</i>						DNA-directed DNA polymerase activity
4033	Lymphoid-restricted membrane protein	<i>LRMP</i>						Endoplasmic reticulum
5347	Polo-like kinase 1	<i>PLK1</i>						G2/M transition DNA damage checkpoint
1763	DNA replication helicase 2 homolog (yeast)	<i>DNA2</i>						Helicase activity
355	Fas (TNF receptor superfamily, member 6)	<i>FAS</i>						Induction of apoptosis by extracellular signals
171392	Zinc finger protein 675	<i>ZNF675</i>						I-kappaB kinase/NF-kappaB cascade
23421	Integrin beta 3 binding protein (beta3-endonexin)	<i>ITGB3BP</i>						Membrane fraction
1063	Centromere protein F	<i>CENPF</i>						Mitotic cell cycle
890	Cyclin A2	<i>CCNA2</i>						Mitotic cell cycle G2/M transition DNA damage checkpoint
605	B-cell CLL/lymphoma 7A	<i>BCL7A</i>						Negative regulation of transcription
4998	Origin recognition complex, subunit 1	<i>ORC1</i>						Origin recognition complex
7157	Tumor protein p53	<i>TP53</i>						p53 binding

5026	Purinergic receptor P2X, ligand-gated ion channel, 5	<i>P2RX5</i>		Positive regulation of calcium-mediated signaling
10733	Polo-like kinase 4	<i>PLK4</i>		Positive regulation of centriole replication
5888	RAD51 homolog (S. cerevisiae)	<i>RAD51</i>		Protein binding
10635	RAD51 associated protein 1	<i>RAD51AP1</i>		Protein binding
253714	MMS22-like, DNA repair protein	<i>MMS22L</i>		Protein binding
57621	Zinc finger and BTB domain containing 2	<i>ZBTB2</i>		Protein binding
57099	Apoptosis, caspase activation inhibitor	<i>AVEN</i>		Protein binding
939	CD27 molecule	<i>CD27</i>		Protein binding
933	CD22 molecule	<i>CD22</i>		Protein binding
7153	Topoisomerase (DNA) II alpha	<i>TOP2A</i>		Protein kinase C binding
5341	Pleckstrin	<i>PLEK</i>		Protein kinase C signaling cascade
53944	Casein kinase 1, gamma 1	<i>CSNK1G1</i>		Protein phosphorylation
10125	RAS guanyl releasing protein 1 (calcium and DAG-regulated)	<i>RASGRP1</i>		Ras protein signal transduction
3925	Stathmin 1	<i>STMN1</i>		Response to virus
57082	Cancer susceptibility candidate 5	<i>CASC5</i>		Spindle assembly check point
255488	Ring finger protein 144B	<i>RNF144B</i>		Ubiquitin-ligase activity
4792	Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha	<i>NFKBIA</i>		Activates NFKB pathway
7124	Tumor necrosis factor(TNF superfamily member 2)	<i>TNF</i>		Activation of MAPK activity
3119	Major histocompatibility complex, class II, DQ beta 1	<i>HLA-DQB1</i>		Antigen processing and presentation via MHC class II
22822	Pleckstrin homology-like domain, family A, member 1	<i>PHLDA1</i>		Apoptosis
54739	XIAP associated factor 1 (XAF1)	<i>XAF1</i>		Apoptosis
7159	Tumor protein p53 binding protein, 2	<i>TP53BP2</i>		Apoptosis
8795	Tumor necrosis factor receptor superfamily, member 10b	<i>TNFRSF10B</i>		Apoptosis
9516	Lipopolysaccharide-induced TNF factor	<i>LITAF</i>		Apoptosis
7412	Vascular cell adhesion molecule	<i>VCAM1</i>		Cell adhesion
22974	TPX2, homolog (Xenopuslaevis)	<i>TPX2</i>		Cell cycle
993	Cell division cycle 25 homolog A (S. pombe)	<i>CDC25A</i>		Cell cycle
157313	Cell division cycle associated 2	<i>CDC42</i>		Cell cycle
4616	Growth arrest and DNA-damage-inducible, beta	<i>GADD45B</i>		Cell cycle
27085	Mdm2, p53 binding protein (mouse) binding protein	<i>MTBP</i>		Cell cycle arrest
143686	Sestrin 3	<i>SESN3</i>		Cell cycle arrest
4088	SMAD family member 3	<i>SMAD3</i>		Cell cycle arrest
9134	Cyclin E2	<i>CCNE2</i>		Cell cycle checkpoint
3638	Insulin induced gene 1	<i>INSIG1</i>		Cell proliferation
6774	Signal transducer and activator of transcription 3	<i>STAT3</i>		DNA binding
55601	DEAD (Asp-Glu-Ala-Asp) box polypeptide 60	<i>DDX60</i>		DNA binding
5111	Proliferating cell nuclear antigen	<i>PCNA</i>		DNA binding
317	Apoptotic peptidase activating factor 1	<i>APAF1</i>		DNA fragmentation involved in apoptotic nuclear change
54107	Polymerase (DNA directed), epsilon 3 (p17 subunit)	<i>POLE3</i>		DNA replication
990	Cell division cycle 6 homolog (S. cerevisiae)	<i>CDC6</i>		DNA replication checkpoint
6502	S-phase kinase-associated protein 2 (p45)	<i>SKP2</i>		G1/S transition of mitotic cell cycle
6515	Solute carrier family 2, member 3	<i>SLC2A3</i>		Glucose transmembrane transporter activity
5997	Regulator of G-protein signaling 2	<i>RGS2</i>		GTPase activator activity
5996	Regulator of G-protein signaling 1	<i>RGS1</i>		GTPase activator activity
8743	TNF ligand	<i>TNFSF10</i>		Immune response
2353	FBJ murine osteosarcoma viral oncogene homolog	<i>FO5</i>		Innate immune response
23586	DEAD (Asp-Glu-Ala-Asp) box polypeptide 58	<i>DDX58</i>		Innate immune system
7706	Tripartite motif-containing 25	<i>TRIM25</i>		Innate immune system
6890	Transporter 1, ATP-binding cassette(MDR/TAP)	<i>TAP1</i>		Intracellular transport of viral proteins in host cell
1200	Tripeptidyl peptidase 1	<i>TPP1</i>		Lysosome activation
11221	Dual specificity phosphatase 10	<i>DUSP10</i>		MAP kinase tyrosine/serine/threonine phosphatase activity
1847	Dual specificity phosphatase 5	<i>DUSP5</i>		MAP kinase tyrosine/serine/threonine phosphatase activity
1843	Dual specificity phosphatase 1	<i>DUSP1</i>		MAP kinase tyrosine/serine/threonine phosphatase activity
200734	Sprouty-related, EVH1 domain containing 2	<i>SPRED2</i>		MAPK inactivation
9693	Rap guanine nucleotide exchange factor (GEF) 2	<i>RAPGEF2</i>		MAPKKK cascade
3105	Major histocompatibility complex, class I, A	<i>HLA-A</i>		MHC class I receptor activity
3106	Major histocompatibility complex, class I, B	<i>HLA-B</i>		MHC class I receptor activity
3107	Major histocompatibility complex, class I, C	<i>HLA-C</i>		MHC class I receptor activity
3135	Major histocompatibility complex, class I, G	<i>HLA-G</i>		MHC class I receptor activity
3134	Major histocompatibility complex, class I, F	<i>HLA-F</i>		MHC class I receptor activity
3133	Major histocompatibility complex, class I, E	<i>HLA-E</i>		MHC class I receptor activity
3108	Major histocompatibility complex, class II, DM alpha	<i>HLA-DMA</i>		MHC class II protein complex
1062	Centromere protein E	<i>CENPE</i>		Mitotic metaphase
1649	DNA-damage-inducible transcript 3	<i>DDIT3</i>		Negative regulation of CREB transcription factor activity
8737	Receptor (TNFRSF)-interacting serine-threonine kinase 1	<i>RIPK1</i>		NFKB pathway activation
23594	Origin recognition complex, subunit 6	<i>ORC6</i>		Origin recognition complex
23175	Lipin1	<i>LPIN1</i>		Phosphatidate phosphatase activity
5777	Protein tyrosine phosphatase, non-receptor type 6	<i>PTPN6</i>		Positive regulation of cell proliferation
5880	Ras-related C3 botulinum toxin substrate 2	<i>RAC2</i>		Positive regulation of cell proliferation
7185	TNF receptor-associated factor 1	<i>TRAF1</i>		Positive regulation of I-kappaB kinase/NF-kappaB cascade
5698	Proteasome	<i>PSMB9</i>		Proteasome complex
3070	Helicase, lymphoid-specific	<i>HELLS</i>		Protein binding
22985	Apoptotic chromatin	<i>ACIN1</i>		Protein binding
7128	Tumor necrosis factor, alpha-induced protein 3	<i>TNFAIP3</i>		Protein binding
7431	Vimentin	<i>VIM</i>		Protein kinase binding
54704	Pyruvate dehydrogenase phosphatase catalytic subunit 1	<i>PDP1</i>		Protein serine/threonine phosphatase complex
51667	Negative regulator of ubiquitin-like proteins 1	<i>NUB1</i>		Protein ubiquitination
10537	Ubiquitin D	<i>UBD</i>		Protein ubiquitination
10725	Nuclear factor of activated T-cells 5	<i>NFAT5</i>		Regulation of transcription, DNA-dependent
3662	Interferon regulatory factor 4	<i>IRF4</i>		Regulation of transcription, DNA-dependent
9636	ISG15 ubiquitin-like modifier	<i>ISG15</i>		Response to virus
1130	Lysosomal trafficking regulator	<i>LYST</i>		Secretion of lysosomal enzymes
5054	Serpin peptidase inhibitor, clade E, member 1	<i>SERPINE1</i>		Serine-type endopeptidase inhibitor activity
5272	Serpin peptidase inhibitor, member 9	<i>SERPINB9</i>		Serine-type endopeptidase inhibitor activity
334	Amyloid beta (A4) precursor-like protein 2	<i>APLP2</i>		Serine-type endopeptidase inhibitor activity
23429	RING1 and YY1 binding protein	<i>RYBP</i>		Transcription corepressor activity
9966	TNF ligand	<i>TNFSF15</i>		Tumor necrosis factor receptor binding

Expression range

