

S25 Table: Geldanamycin significantly affects the expression of the selected 163 genes as evident in the “LINCS L1000 Chem Pert down” category in Enrichr. The last number after the - is dose density.

Term	Overlap	P-value	Adjusted P-value
LINCS L1000 Chem Pert down			
LJP005 HA1E 24H-geldanamycin-3.33	18/148	$2.41 \times 10^{-16}$	$3.06 \times 10^{-13}$
LJP005 HS578T 24H-geldanamycin-10	16/131	$1.11 \times 10^{-14}$	$6.92 \times 10^{-12}$
LJP006 SKBR3 24H-geldanamycin-0.37	14/91	$2.01 \times 10^{-14}$	$1.07 \times 10^{-11}$
LJP006 HA1E 24H-geldanamycin-3.33	16/138	$2.55 \times 10^{-14}$	$1.26 \times 10^{-11}$
LJP005 HS578T 24H-geldanamycin-3.33	15/118	$4.24 \times 10^{-14}$	$1.98 \times 10^{-11}$
LJP006 HA1E 24H-geldanamycin-0.37	15/121	$6.20 \times 10^{-14}$	$2.53 \times 10^{-11}$
LJP006 HA1E 24H-geldanamycin-1.11	16/157	$1.97 \times 10^{-13}$	$6.87 \times 10^{-11}$
LJP006 MDAMB231 24H-geldanamycin-1.11	14/123	$1.45 \times 10^{-12}$	$3.54 \times 10^{-10}$
LJP006 SKBR3 24H-geldanamycin-0.12	12/78	$1.56 \times 10^{-12}$	$3.71 \times 10^{-10}$
LJP005 A375 24H-geldanamycin-3.33	16/183	$2.14 \times 10^{-12}$	$4.73 \times 10^{-10}$
LJP005 HA1E 24H-geldanamycin-10	14/137	$6.46 \times 10^{-12}$	$1.14 \times 10^{-9}$
LJP006 A375 24H-geldanamycin-0.37	15/166	$6.69 \times 10^{-12}$	$1.16 \times 10^{-9}$
LJP005 HA1E 24H-geldanamycin-1.11	14/142	$1.06 \times 10^{-11}$	$1.68 \times 10^{-9}$
LJP005 SKBR3 24H-geldanamycin-0.37	11/82	$6.38 \times 10^{-11}$	$7.41 \times 10^{-9}$
LJP005 SKBR3 24H-geldanamycin-1.11	10/63	$8.63 \times 10^{-11}$	$9.22 \times 10^{-9}$
LJP005 HS578T 24H-geldanamycin-1.11	12/109	$9.04 \times 10^{-11}$	$9.60 \times 10^{-9}$
LJP005 BT20 24H-geldanamycin-0.12	10/64	$1.02 \times 10^{-10}$	$1.05 \times 10^{-8}$
LJP005 HA1E 24H-geldanamycin-0.37	13/141	$1.39 \times 10^{-10}$	$1.37 \times 10^{-8}$
LJP006 A375 24H-geldanamycin-1.11	14/182	$3.00 \times 10^{-10}$	$2.60 \times 10^{-8}$
LJP006 MDAMB231 24H-geldanamycin-0.37	11/96	$3.64 \times 10^{-10}$	$3.05 \times 10^{-8}$
LJP006 BT20 24H-geldanamycin-1.11	10/75	$5.15 \times 10^{-10}$	$4.04 \times 10^{-8}$
LJP005 HEPG2 24H-geldanamycin-3.33	13/159	$6.23 \times 10^{-10}$	$4.77 \times 10^{-8}$
LJP006 HS578T 24H-geldanamycin-10	12/132	$8.57 \times 10^{-10}$	$6.20 \times 10^{-8}$
LJP005 MCF10A 3H-geldanamycin-0.04	9/61	$1.53 \times 10^{-9}$	$9.92 \times 10^{-8}$
LJP006 SKBR3 24H-geldanamycin-0.04	10/89	$2.86 \times 10^{-9}$	$1.68 \times 10^{-7}$
LJP006 HS578T 24H-geldanamycin-0.37	12/148	$3.20 \times 10^{-9}$	$1.85 \times 10^{-7}$
LJP006 SKBR3 24H-geldanamycin-1.11	8/50	$6.57 \times 10^{-9}$	$3.39 \times 10^{-7}$
LJP006 HEPG2 24H-geldanamycin-3.33	10/98	$7.41 \times 10^{-9}$	$3.75 \times 10^{-7}$
LJP006 BT20 24H-geldanamycin-0.12	9/74	$8.93 \times 10^{-9}$	$4.44 \times 10^{-7}$
LJP005 SKBR3 24H-geldanamycin-0.04	9/78	$1.43 \times 10^{-8}$	$6.49 \times 10^{-7}$
LJP005 A375 24H-geldanamycin-0.04	9/81	$2.01 \times 10^{-8}$	$8.55 \times 10^{-7}$
LJP006 HS578T 24H-geldanamycin-1.11	11/145	$2.97 \times 10^{-8}$	$1.18 \times 10^{-6}$
LJP006 HA1E 24H-geldanamycin-10	9/86	$3.42 \times 10^{-8}$	$1.34 \times 10^{-6}$
LJP006 SKBR3 24H-geldanamycin-3.33	9/86	$3.42 \times 10^{-8}$	$1.33 \times 10^{-6}$
LJP006 HME1 24H-geldanamycin-0.04	10/121	$5.70 \times 10^{-8}$	$2.08 \times 10^{-6}$
LJP006 HS578T 24H-geldanamycin-3.33	10/122	$6.17 \times 10^{-8}$	$2.24 \times 10^{-6}$
LJP006 MCF10A 3H-geldanamycin-0.37	8/66	$6.30 \times 10^{-8}$	$2.25 \times 10^{-6}$
LJP005 MDAMB231 24H-geldanamycin-3.33	7/46	$8.60 \times 10^{-8}$	$2.95 \times 10^{-6}$
LJP006 A549 24H-geldanamycin-0.37	6/28	$8.68 \times 10^{-8}$	$2.96 \times 10^{-6}$
LJP006 HS578T 24H-geldanamycin-0.12	9/97	$9.84 \times 10^{-8}$	$3.31 \times 10^{-6}$
LJP006 HME1 24H-geldanamycin-3.33	11/164	$1.05 \times 10^{-7}$	$3.51 \times 10^{-6}$
LJP006 A375 24H-geldanamycin-0.04	9/104	$1.80 \times 10^{-7}$	$5.55 \times 10^{-6}$
LJP005 SKBR3 24H-geldanamycin-3.33	8/78	$2.37 \times 10^{-7}$	$6.98 \times 10^{-6}$
LJP006 MCF10A 3H-geldanamycin-3.33	8/80	$2.89 \times 10^{-7}$	$8.17 \times 10^{-6}$
LJP006 MDAMB231 24H-geldanamycin-3.33	8/84	$4.22 \times 10^{-7}$	$1.12 \times 10^{-5}$
LJP005 MCF10A 3H-geldanamycin-0.37	8/85	$4.63 \times 10^{-7}$	$1.20 \times 10^{-5}$
LJP005 MCF10A 3H-geldanamycin-0.12	8/86	$5.07 \times 10^{-7}$	$1.29 \times 10^{-5}$
LJP006 HME1 24H-geldanamycin-10	10/153	$5.17 \times 10^{-7}$	$1.31 \times 10^{-5}$
LJP006 HEPG2 24H-geldanamycin-1.11	8/88	$6.06 \times 10^{-7}$	$1.50 \times 10^{-5}$
LJP005 HS578T 24H-geldanamycin-0.12	8/89	$6.61 \times 10^{-7}$	$1.62 \times 10^{-5}$
LJP006 MDAMB231 24H-geldanamycin-0.12	8/89	$6.61 \times 10^{-7}$	$1.61 \times 10^{-5}$
LJP006 MCF10A 3H-geldanamycin-0.04	7/62	$7.08 \times 10^{-7}$	$1.72 \times 10^{-5}$
LJP006 BT20 24H-geldanamycin-3.33	8/94	$1.01 \times 10^{-6}$	$2.32 \times 10^{-5}$

S25 Table: (Continued)

LJP006 MDAMB231 24H-geldanamycin-10	8/94	$1.01 \times 10^{-6}$	$2.32 \times 10^{-5}$
LJP005 BT20 24H-geldanamycin-0.37	8/96	$1.18 \times 10^{-6}$	$2.67 \times 10^{-5}$
LJP006 PC3 24H-geldanamycin-10	8/96	$1.18 \times 10^{-6}$	$2.67 \times 10^{-5}$
LJP005 BT20 24H-geldanamycin-1.11	7/67	$1.21 \times 10^{-6}$	$2.73 \times 10^{-5}$
LJP006 MCF10A 3H-geldanamycin-0.12	7/67	$1.21 \times 10^{-6}$	$2.72 \times 10^{-5}$
LJP005 HEPG2 24H-geldanamycin-1.11	9/131	$1.29 \times 10^{-6}$	$2.85 \times 10^{-5}$
LJP006 A375 24H-geldanamycin-3.33	9/131	$1.29 \times 10^{-6}$	$2.85 \times 10^{-5}$
LJP005 MCF10A 3H-geldanamycin-3.33	7/68	$1.34 \times 10^{-6}$	$2.96 \times 10^{-5}$
LJP005 MCF7 3H-geldanamycin-10	6/45	$1.67 \times 10^{-6}$	$3.56 \times 10^{-5}$
LJP006 HA1E 24H-geldanamycin-0.12	6/45	$1.67 \times 10^{-6}$	$3.56 \times 10^{-5}$
LJP005 HCC515 24H-geldanamycin-3.33	9/140	$2.24 \times 10^{-6}$	$4.54 \times 10^{-5}$
LJP006 HCC515 24H-geldanamycin-1.11	9/144	$2.83 \times 10^{-6}$	$5.51 \times 10^{-5}$
LJP006 LNCAP 24H-geldanamycin-3.33	9/163	$7.79 \times 10^{-6}$	$1.30 \times 10^{-4}$
LJP006 HME1 24H-geldanamycin-0.12	9/164	$8.19 \times 10^{-6}$	$1.37 \times 10^{-4}$
LJP006 MCF10A 3H-geldanamycin-1.11	7/89	$8.26 \times 10^{-6}$	$1.37 \times 10^{-4}$
LJP006 PC3 24H-geldanamycin-3.33	7/90	$8.89 \times 10^{-6}$	$1.46 \times 10^{-4}$
LJP005 SKBR3 24H-geldanamycin-10	7/92	$1.03 \times 10^{-5}$	$1.66 \times 10^{-4}$
LJP005 HS578T 3H-geldanamycin-0.37	5/36	$1.04 \times 10^{-5}$	$1.67 \times 10^{-4}$
LJP006 MCF7 3H-geldanamycin-1.11	5/38	$1.37 \times 10^{-5}$	$2.10 \times 10^{-4}$
LJP006 BT20 24H-geldanamycin-10	7/97	$1.46 \times 10^{-5}$	$2.24 \times 10^{-4}$
LJP005 SKBR3 24H-geldanamycin-0.12	6/69	$2.10 \times 10^{-5}$	$3.05 \times 10^{-4}$
LJP006 BT20 24H-geldanamycin-0.37	6/69	$2.10 \times 10^{-5}$	$3.04 \times 10^{-4}$
LJP006 HME1 3H-geldanamycin-1.11	5/42	$2.25 \times 10^{-5}$	$3.24 \times 10^{-4}$
LJP005 MCF10A 3H-geldanamycin-10	5/43	$2.53 \times 10^{-5}$	$3.59 \times 10^{-4}$
LJP005 MCF10A 3H-geldanamycin-1.11	6/72	$2.68 \times 10^{-5}$	$3.77 \times 10^{-4}$
LJP006 HCC515 24H-geldanamycin-3.33	7/110	$3.31 \times 10^{-5}$	$4.51 \times 10^{-4}$
LJP006 LNCAP 24H-geldanamycin-1.11	7/110	$3.31 \times 10^{-5}$	$4.51 \times 10^{-4}$
LJP006 A549 24H-geldanamycin-1.11	6/76	$3.65 \times 10^{-5}$	$4.88 \times 10^{-4}$
LJP006 HME1 24H-geldanamycin-0.37	8/154	$3.90 \times 10^{-5}$	$5.18 \times 10^{-4}$
LJP006 SKBR3 24H-geldanamycin-10	6/77	$3.93 \times 10^{-5}$	$5.19 \times 10^{-4}$
LJP005 A549 24H-geldanamycin-1.11	6/78	$4.23 \times 10^{-5}$	$5.52 \times 10^{-4}$
LJP005 MDAMB231 24H-geldanamycin-0.12	6/78	$4.23 \times 10^{-5}$	$5.51 \times 10^{-4}$
LJP006 A375 24H-geldanamycin-0.12	8/163	$5.84 \times 10^{-5}$	$7.25 \times 10^{-4}$
LJP006 HS578T 3H-geldanamycin-1.11	5/52	$6.45 \times 10^{-5}$	$7.82 \times 10^{-4}$
LJP005 A549 24H-geldanamycin-3.33	7/123	$6.75 \times 10^{-5}$	$8.18 \times 10^{-4}$
LJP006 MDAMB231 3H-geldanamycin-1.11	5/53	$7.07 \times 10^{-5}$	$8.48 \times 10^{-4}$
LJP005 BT20 24H-geldanamycin-0.04	6/87	$7.83 \times 10^{-5}$	$9.20 \times 10^{-4}$
LJP006 A549 24H-geldanamycin-3.33	6/87	$7.83 \times 10^{-5}$	$9.19 \times 10^{-4}$
LJP005 PC3 24H-geldanamycin-3.33	6/89	$8.89 \times 10^{-5}$	$1.02 \times 10^{-3}$
LJP006 HEPG2 24H-geldanamycin-10	6/94	$1.20 \times 10^{-4}$	$1.31 \times 10^{-3}$
LJP005 HS578T 3H-geldanamycin-1.11	4/32	$1.28 \times 10^{-4}$	$1.39 \times 10^{-3}$
LJP006 HME1 24H-geldanamycin-1.11	7/145	$1.89 \times 10^{-4}$	$1.92 \times 10^{-3}$
LJP005 HS578T 3H-geldanamycin-3.33	4/36	$2.04 \times 10^{-4}$	$2.06 \times 10^{-3}$
LJP005 MCF10A 24H-geldanamycin-10	5/67	$2.17 \times 10^{-4}$	$2.17 \times 10^{-3}$
LJP006 MDAMB231 3H-geldanamycin-0.12	3/16	$2.75 \times 10^{-4}$	$2.66 \times 10^{-3}$
LJP006 PC3 24H-geldanamycin-1.11	5/72	$3.05 \times 10^{-4}$	$2.90 \times 10^{-3}$
LJP005 HS578T 3H-geldanamycin-10	4/40	$3.09 \times 10^{-4}$	$2.93 \times 10^{-3}$
LJP005 BT20 24H-geldanamycin-3.33	5/73	$3.25 \times 10^{-4}$	$3.06 \times 10^{-3}$
LJP005 HCC515 24H-geldanamycin-1.11	6/113	$3.29 \times 10^{-4}$	$3.09 \times 10^{-3}$
LJP006 BT20 3H-geldanamycin-10	4/44	$4.48 \times 10^{-4}$	$3.98 \times 10^{-3}$
LJP006 HEPG2 24H-geldanamycin-0.37	4/44	$4.48 \times 10^{-4}$	$3.97 \times 10^{-3}$
LJP005 MDAMB231 24H-geldanamycin-1.11	4/46	$5.31 \times 10^{-4}$	$4.61 \times 10^{-3}$
LJP006 SKBR3 3H-geldanamycin-0.12	3/20	$5.47 \times 10^{-4}$	$4.71 \times 10^{-3}$
LJP006 LNCAP 24H-geldanamycin-10	7/173	$5.51 \times 10^{-4}$	$4.74 \times 10^{-3}$
LJP006 HT29 24H-geldanamycin-1.11	5/85	$6.56 \times 10^{-4}$	$5.47 \times 10^{-3}$
LJP005 SKBR3 3H-geldanamycin-0.04	4/49	$6.77 \times 10^{-4}$	$5.62 \times 10^{-3}$
LJP005 HS578T 3H-geldanamycin-0.04	3/22	$7.30 \times 10^{-4}$	$6.01 \times 10^{-3}$

S25 Table: (Continued)

LJP006 SKBR3 3H-geldanamycin-1.11	4/51	$7.89 \times 10^{-4}$	$6.39 \times 10^{-3}$
LJP005 MCF10A 24H-geldanamycin-3.33	6/134	$8.13 \times 10^{-4}$	$6.56 \times 10^{-3}$
LJP005 BT20 24H-geldanamycin-10	4/52	$8.49 \times 10^{-4}$	$6.82 \times 10^{-3}$
LJP006 MCF10A 24H-geldanamycin-0.12	6/137	$9.12 \times 10^{-4}$	$7.26 \times 10^{-3}$
LJP005 SKBR3 3H-geldanamycin-3.33	4/53	$9.12 \times 10^{-4}$	$7.25 \times 10^{-3}$
LJP006 HS578T 3H-geldanamycin-3.33	4/53	$9.12 \times 10^{-4}$	$7.24 \times 10^{-3}$
LJP005 MDAMB231 24H-geldanamycin-0.37	4/54	$9.79 \times 10^{-4}$	$7.70 \times 10^{-3}$
CPC014 NPC 24H-geldanamycin-10.0	6/139	$9.84 \times 10^{-4}$	$7.71 \times 10^{-3}$
LJP006 HS578T 3H-geldanamycin-0.37	4/56	$1.12 \times 10^{-3}$	$8.60 \times 10^{-3}$
LJP006 MCF10A 24H-geldanamycin-0.37	6/144	$1.18 \times 10^{-3}$	$9.01 \times 10^{-3}$
LJP005 MCF10A 24H-geldanamycin-0.12	6/147	$1.31 \times 10^{-3}$	$9.80 \times 10^{-3}$
LJP006 MCF10A 24H-geldanamycin-0.04	5/102	$1.49 \times 10^{-3}$	$1.09 \times 10^{-2}$
LJP005 SKBR3 3H-geldanamycin-0.12	3/28	$1.50 \times 10^{-3}$	$1.09 \times 10^{-2}$
CPC018 A549 24H-geldanamycin-10.0	5/104	$1.62 \times 10^{-3}$	$1.17 \times 10^{-2}$
CPC009 MCF7 24H-geldanamycin-10.0	5/108	$1.92 \times 10^{-3}$	$1.35 \times 10^{-2}$
LJP005 MDAMB231 3H-geldanamycin-3.33	3/31	$2.02 \times 10^{-3}$	$1.40 \times 10^{-2}$
LJP005 MCF10A 24H-geldanamycin-1.11	5/110	$2.08 \times 10^{-3}$	$1.43 \times 10^{-2}$
LJP006 MCF7 24H-geldanamycin-0.04	3/33	$2.42 \times 10^{-3}$	$1.63 \times 10^{-2}$
LJP005 MDAMB231 3H-geldanamycin-1.11	3/34	$2.64 \times 10^{-3}$	$1.75 \times 10^{-2}$
LJP006 MDAMB231 3H-geldanamycin-3.33	3/34	$2.64 \times 10^{-3}$	$1.75 \times 10^{-2}$
LJP005 MCF10A 24H-geldanamycin-0.04	5/119	$2.93 \times 10^{-3}$	$1.90 \times 10^{-2}$
CPC006 SNUC4 6H-geldanamycin-10.0	4/75	$3.30 \times 10^{-3}$	$2.10 \times 10^{-2}$
LJP006 HT29 24H-geldanamycin-0.37	3/37	$3.37 \times 10^{-3}$	$2.13 \times 10^{-2}$
LJP005 MDAMB231 3H-geldanamycin-0.04	3/38	$3.64 \times 10^{-3}$	$2.27 \times 10^{-2}$
LJP005 MDAMB231 3H-geldanamycin-10	3/38	$3.64 \times 10^{-3}$	$2.27 \times 10^{-2}$
LJP006 MCF10A 24H-geldanamycin-1.11	5/129	$4.14 \times 10^{-3}$	$2.52 \times 10^{-2}$
LJP005 MCF7 24H-geldanamycin-1.11	5/130	$4.27 \times 10^{-3}$	$2.58 \times 10^{-2}$
LJP006 MCF10A 24H-geldanamycin-3.33	5/130	$4.27 \times 10^{-3}$	$2.58 \times 10^{-2}$
LJP006 HCC515 24H-geldanamycin-10	4/83	$4.74 \times 10^{-3}$	$2.81 \times 10^{-2}$
LJP006 HME1 3H-geldanamycin-0.12	3/42	$4.83 \times 10^{-3}$	$2.84 \times 10^{-2}$
LJP006 LNCAP 3H-geldanamycin-1.11	3/43	$5.16 \times 10^{-3}$	$2.99 \times 10^{-2}$
CPC006 NCIH1694 6H-geldanamycin-10.0	3/44	$5.51 \times 10^{-3}$	$3.17 \times 10^{-2}$
LJP006 HME1 3H-geldanamycin-0.37	3/44	$5.51 \times 10^{-3}$	$3.16 \times 10^{-2}$
LJP005 HS578T 24H-geldanamycin-0.37	4/88	$5.83 \times 10^{-3}$	$3.31 \times 10^{-2}$
CPC006 THP1 6H-geldanamycin-10.0	4/90	$6.31 \times 10^{-3}$	$3.51 \times 10^{-2}$
CPC013 A549 6H-geldanamycin-10.0	4/93	$7.08 \times 10^{-3}$	$3.84 \times 10^{-2}$
LJP005 PC3 24H-geldanamycin-1.11	4/93	$7.08 \times 10^{-3}$	$3.84 \times 10^{-2}$
CPC005 HT29 24H-geldanamycin-10.0	5/147	$7.14 \times 10^{-3}$	$3.87 \times 10^{-2}$
CPC004 A375 6H-geldanamycin-10.0	3/49	$7.44 \times 10^{-3}$	$4.01 \times 10^{-2}$
CPC004 VCAP 24H-geldanamycin-10.0	4/95	$7.62 \times 10^{-3}$	$4.07 \times 10^{-2}$
CPC016 MCF7 24H-geldanamycin-10.0	5/150	$7.76 \times 10^{-3}$	$4.14 \times 10^{-2}$
LJP005 HT29 24H-geldanamycin-3.33	5/150	$7.76 \times 10^{-3}$	$4.14 \times 10^{-2}$
CPC018 ASC 24H-geldanamycin-10.0	3/51	$8.31 \times 10^{-3}$	$4.37 \times 10^{-2}$
LJP006 BT20 24H-geldanamycin-0.04	3/51	$8.31 \times 10^{-3}$	$4.36 \times 10^{-2}$
CPC006 U937 6H-geldanamycin-10.0	4/98	$8.49 \times 10^{-3}$	$4.44 \times 10^{-2}$
LJP005 MDAMB231 3H-geldanamycin-0.37	3/52	$8.77 \times 10^{-3}$	$4.56 \times 10^{-2}$
CPC005 A549 24H-geldanamycin-10.0	5/156	$9.11 \times 10^{-3}$	$4.70 \times 10^{-2}$
LJP005 BT20 3H-geldanamycin-3.33	2/18	$9.27 \times 10^{-3}$	$4.75 \times 10^{-2}$