

Table S3. The genes statistically significantly associated with tissues of origin. B5, A9, D1, C2, and G5 are, on average, overexpressed in the melanomas, whereas A3, C3, and A7 are underexpressed in those cells. B6 is the only gene significantly overexpressed in the CNS cells, and C7 is the only gene overexpressed in the leukemia. Calculations were done for the 59 cell lines (excluding NCI/ADR-RES) using a Monte Carlo permutation t-test.

Significant gene	Tissue of origin	Mean (\pm SD) in tissue vs. mean (\pm SD) in the rest	Adjusted permutation P value
B5	Melanoma	2.8 (\pm 2.6) vs. -0.6 (\pm 0.7)	< 0.0001
A9	Melanoma	2.9 (\pm 2.7) vs. -0.6 (\pm 1.3)	< 0.0001
D1	Melanoma	2.3 (\pm 1.8) vs. -0.4 (\pm 1.4)	0.0005
C2	Melanoma	3.7 (\pm 2.0) vs. -0.7 (\pm 2.8)	0.0014
A3	Melanoma	-4.3 (\pm 1.4) vs. 0.8 (\pm 3.4)	0.0022
G5	Melanoma	0.8 (\pm 1.0) vs. -0.2 (\pm 0.7)	0.0215
C3	Melanoma	-2.3 (\pm 1.0) vs. 0.6 (\pm 2.4)	0.0298
A7	Melanoma	-1.2 (\pm 1.4) vs. 0.2 (\pm 1.1)	0.0467
B6	CNS	1.4 (\pm 0.8) vs. -0.1 (\pm 0.8)	0.0181
C7	Leukemia	3.1 (\pm 2.6) vs. -0.3 (\pm 1.9)	0.0239