

SUPPLEMENTARY MATERIAL

Table S1. LUT, A chip Increased

	1	2	3	4	5	6	7	8
<–100	0	3	6	6	6	X	X	X
–100 to –50	1	3	5	6	6	6	X	X
–50 to 0	1	1	3	6	6	6	6	6
0 to 50	0	1	2	4	5	6	6	6
50–100	1	0	1	3	5	5	6	6
100–150	2	0	2	3	5	6	6	6
150–200	1	1	2	4	4	6	6	6
200–250	1	0	3	6	6	6	6	X
250–300	2	1	2	4	6	6	6	X
300–350	1	2	6	6	6	6	6	X
350–450	2	1	2	4	6	6	6	X
450–550	2	2	1	3	3	6	6	X
550–700	1	2	1	3	6	6	6	X
700–850	2	3	5	6	6	6	X	X
850–1000	1	5	6	6	6	6	X	X
1000–1200	3	3	4	4	5	6	X	X
1200–1500	2	3	4	6	6	6	X	X
1500–1800	3	5	6	6	6	6	X	X
1800–2200	3	3	6	6	6	6	X	X
2200–2800	4	4	5	6	6	X	X	X
2800–4600	3	6	6	6	6	X	X	X
>4600	6	X	X	X	X	X	X	X

Table S2. LUT, A Chip Decreased

	1	2	3	4	5	6	7	8
<–100	2	4	5	6	6	X	X	X
–100 to –50	2	5	6	6	6	6	X	X
–50 to 0	1	1	3	6	6	6	6	6
0 to 50	0	1	2	5	6	6	6	6
50–100	2	0	1	3	5	6	6	6
100–150	3	1	1	3	5	5	5	6
150–200	2	2	3	3	5	5	6	6
200–250	3	2	3	4	5	5	6	X
250–300	3	3	1	2	3	4	6	X
300–350	3	1	2	5	6	6	6	X
350–450	3	3	2	0	2	4	6	X
450–550	3	3	3	2	3	4	5	X
550–700	3	3	1	3	4	4	6	X
700–850	3	3	2	1	2	4	X	X
850–1000	3	1	1	2	4	4	X	X
1000–1200	3	3	2	1	2	3	X	X
1200–1500	3	1	0	3	4	2	X	X
1500–1800	3	1	1	2	2	2	X	X
1800–2200	3	1	2	0	2	2	X	X
2200–2800	3	1	0	1	2	X	X	X
2800–4600	1	0	2	3	4	X	X	X
>4600	5	X	X	X	X	X	X	X

Table S3. LUT, B Chip Increased

	1	2	3	4	5	6	7	8
<–100	0	1	4	6	6	X	X	X
–100 to –50	0	1	3	4	5	6	X	X
–50 to 0	1	0	1	3	4	5	6	6
0 to 50	1	0	1	1	2	4	6	6
50–100	2	0	1	2	4	4	4	6
100–150	3	0	2	2	3	6	6	6
150–200	2	1	2	2	2	3	6	6
200–250	3	0	2	4	6	6	6	X
250–300	3	1	2	2	4	5	6	X
300–350	2	1	2	4	6	6	6	X
350–450	3	1	0	2	3	3	6	X
450–550	1	1	3	3	3	4	4	X
550–700	1	2	2	4	4	6	6	X
700–850	3	1	2	3	5	6	X	X
850–1000	3	2	3	4	3	5	X	X
1000–1200	3	3	1	4	4	6	X	X
1200–1500	3	2	2	4	5	6	X	X
1500–1800	3	1	3	4	6	6	X	X
1800–2200	2	1	3	5	6	6	X	X
2200–2800	1	2	4	6	6	X	X	X
2800–4600	1	2	6	6	6	X	X	X
>4600	4	X	X	X	X	X	X	X

Table S4. LUT, B Chip Decreased

	1	2	3	4	5	6	7	8
<–100	0	2	5	6	6	X	X	X
–100 to –50	0	2	2	3	6	6	X	X
–50 to 0	1	0	1	3	4	4	6	6
0 to 50	1	0	1	2	3	4	6	6
50–100	3	1	1	2	4	3	3	6
100–150	3	0	3	2	5	5	5	6
150–200	2	2	2	3	2	4	6	6
200–250	3	3	3	2	2	6	6	X
250–300	3	3	2	3	3	3	5	X
300–350	3	1	4	4	4	4	6	X
350–450	3	3	2	2	1	3	4	X
450–550	3	3	2	2	2	4	5	X
550–700	3	3	0	2	4	3	5	X
700–850	3	3	2	2	4	6	X	X
850–1000	3	1	2	2	5	6	X	X
1000–1200	3	3	1	2	3	5	X	X
1200–1500	3	1	2	2	4	3	X	X
1500–1800	2	0	4	4	6	6	X	X
1800–2200	3	1	1	4	6	6	X	X
2200–2800	0	2	2	4	6	X	X	X
2800–4600	0	2	2	4	6	X	X	X
>4600	3	X	X	X	X	X	X	X

Table S5. Conversion of Average Difference to scaled score

Average Difference	Scaled Score	Average Difference	Scaled Score	Average Difference	Scaled Score
–10	0	770	16	3250	37
0	0	780	16	3300	37
10	1	790	16	3350	37
20	1	800	16	3400	37
30	1	810	17	3450	38
40	1	820	17	3500	38
50	1	830	17	3550	38
60	2	840	17	3600	38
70	2	850	17	3650	39
80	2	860	18	3700	39
90	2	870	18	3750	39
100	2	880	18	3800	39
110	3	890	18	3850	40
120	3	900	18	3900	40
130	3	910	19	3950	40
140	3	920	19	4000	40
150	3	930	19	4050	41
160	4	940	19	4100	41
170	4	950	19	4150	41
180	4	960	20	4201	41
190	4	970	20	4301	41
200	4	980	20	4401	42
210	5	990	20	4501	42
220	5	1000	20	4601	42
230	5	1010	21	4701	42
240	5	1020	21	4801	43
250	5	1030	21	4901	43
260	6	1040	21	5001	43
270	6	1050	21	5101	43
280	6	1060	21	5201	44
290	6	1070	21	5301	44
300	6	1080	21	5401	44
310	7	1090	21	5501	44
320	7	1100	21	5601	45
330	7	1110	22	5701	45
340	7	1120	22	5801	45
350	7	1150	22	5901	45
360	8	1200	22	6001	46
370	8	1250	23	6101	46
380	8	1300	23	6201	46
390	8	1350	24	6301	46
400	8	1400	24	6401	47
410	9	1450	25	6501	47

Table S5. *Continued*

Average Difference	Scaled Score	Average Difference	Scaled Score	Average Difference	Scaled Score
420	9	1500	25	6601	47
430	9	1550	26	6701	47
440	9	1600	26	6801	48
450	9	1650	27	6901	48
460	10	1700	27	7001	48
470	10	1750	28	7101	48
480	10	1800	28	7201	49
490	10	1850	29	7301	49
500	10	1900	29	7401	49
510	11	1950	30	7501	49
520	11	2000	30	7601	50
530	11	2050	31	7701	50
540	11	2100	31	7801	50
550	11	2150	31	7901	50
560	12	2200	31	8001	51
570	12	2001	31	8101	51
580	12	2300	32	8201	51
590	12	2350	32	8301	51
600	12	2400	32	8401	52
610	13	2450	33	8799	52
620	13	2500	33	8799	52
630	13	2550	33	8799	52
640	13	2600	33	8800	52
650	13	2650	34	8801	53
660	14	2700	34	8850	53
670	14	2750	34	9001	54
680	14	2800	34	9500	54
690	14	2850	35	10001	55
700	14	2900	35	10999	55
710	15	2950	35	11001	56
720	15	3000	35	12001	57
730	15	3050	36	13001	58
740	15	3100	36	14001	58
750	15	3150	36	20000	58
760	16	3200	36		

Table S6. Matrix used for LUTs score calculations[a]

Baseline Average Difference	Scaled Average Difference Scores							
	1[b]	2[b]	3[b]	4[b]	5[b]	6[b]	7[b]	8[b]
<–100	0	1–4	5–13	14–19	20	X	X	X
–100 to –50	0	1	2	3	4–5	6	X	X
–50 to 0	0	1	2	3	4	5–7	8–11	>12
0 to 50	<1	2	3	4	5–6	7–10	11–17	>18
50–100	<2	3	4	5	6	7–8	9–15	>16
100–150	<3	4–5	6	7–8	9–11	12–14	15–18	>19
150–200	<5	6	7	8	9–10	11–12	13–16	>17
200–250	<6	7–8	9–10	11–12	13–16	17–21	22	X
250–300	<6	7–8	9–10	11–13	14–16	17–21	22	X
300–350	<9	10–12	13–15	16–18	19–22	23–25	26	X
350–450	<9	10–12	13–14	15–16	17–20	21–25	26	X
450–550	<12	13–14	15–16	17–18	19–21	22–24	25	X
550–700	<16	17–19	20–22	23–24	25–26	27–30	31	X
700–850	<20	21–22	23–24	25–26	27–30	31	X	X
850–1000	<23	24–25	26–27	28–29	30–31	32	X	X
1000–1200	<22	23–25	26–28	29–31	32–37	38	X	X
1200–1500	<26	27–30	31–33	34–37	38–40	41	X	X
1500–1800	<31	32–35	36–39	40–44	45–49	50	X	X
1800–2200	<33	34–36	37–40	41–44	45–48	49	X	X
2200–2800	<39	40–41	42–44	45–47	48	X	X	X
2800–4600	<45	46–48	49–51	52–55	56	X	X	X
>4600	0–58	X	X	X	X	X	X	X

[a]For example, a given probe set in a comparison between partner and baseline Mu11K sub**A** chips is said to be 'Increased' and has a GeneChip Average Difference (AD) of 245 and a Baseline AD (BLAD, calculated as AD – Average Difference Change) of 55. To determine the LUT score manually, one first calculates the scaled AD from the conversion columns in Table S5 (245 scales to 5). The Matrix above is used to find the row where the BLAD of 55 belongs (i.e., in the '50–100' row). The column corresponding to a scaled AD of 5 is found (column 4). The row–column coordinates identify a single 'bin' in the matrix that can then be used in the appropriate LUT ('A Chip Increased' in this case) to find the LUT score. In this example, the LUT score for BLAD 55 bin 4 in Table S1 is a '3'. LUT scores range from 0 to 6, with 6 being most likely to be a 'real' change.
[b]Column number.