

RNA-SEQUENCE ANALYSIS OF HUMAN B-CELLS

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Percent of Genes Overlapping Tracks

Percentile (FPKM)

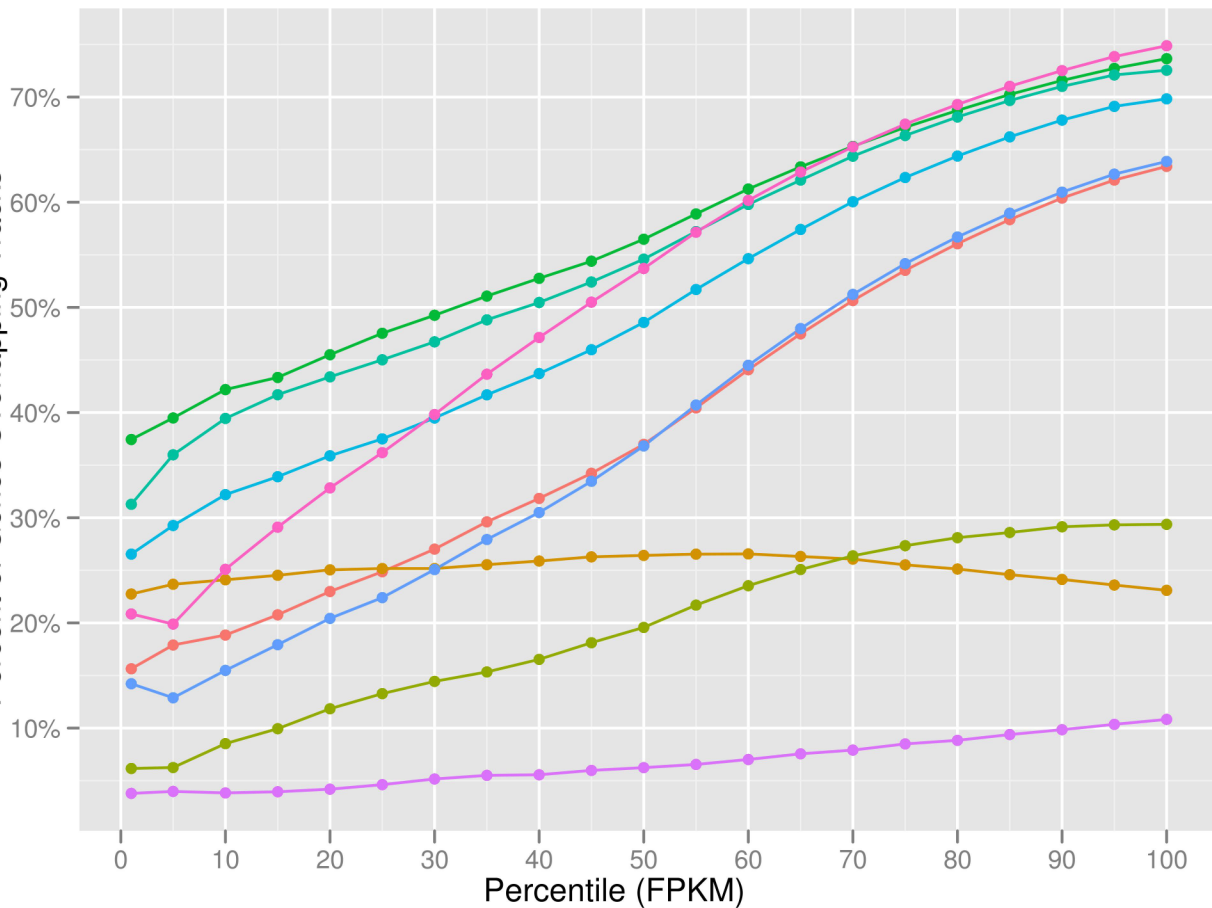


Figure S2

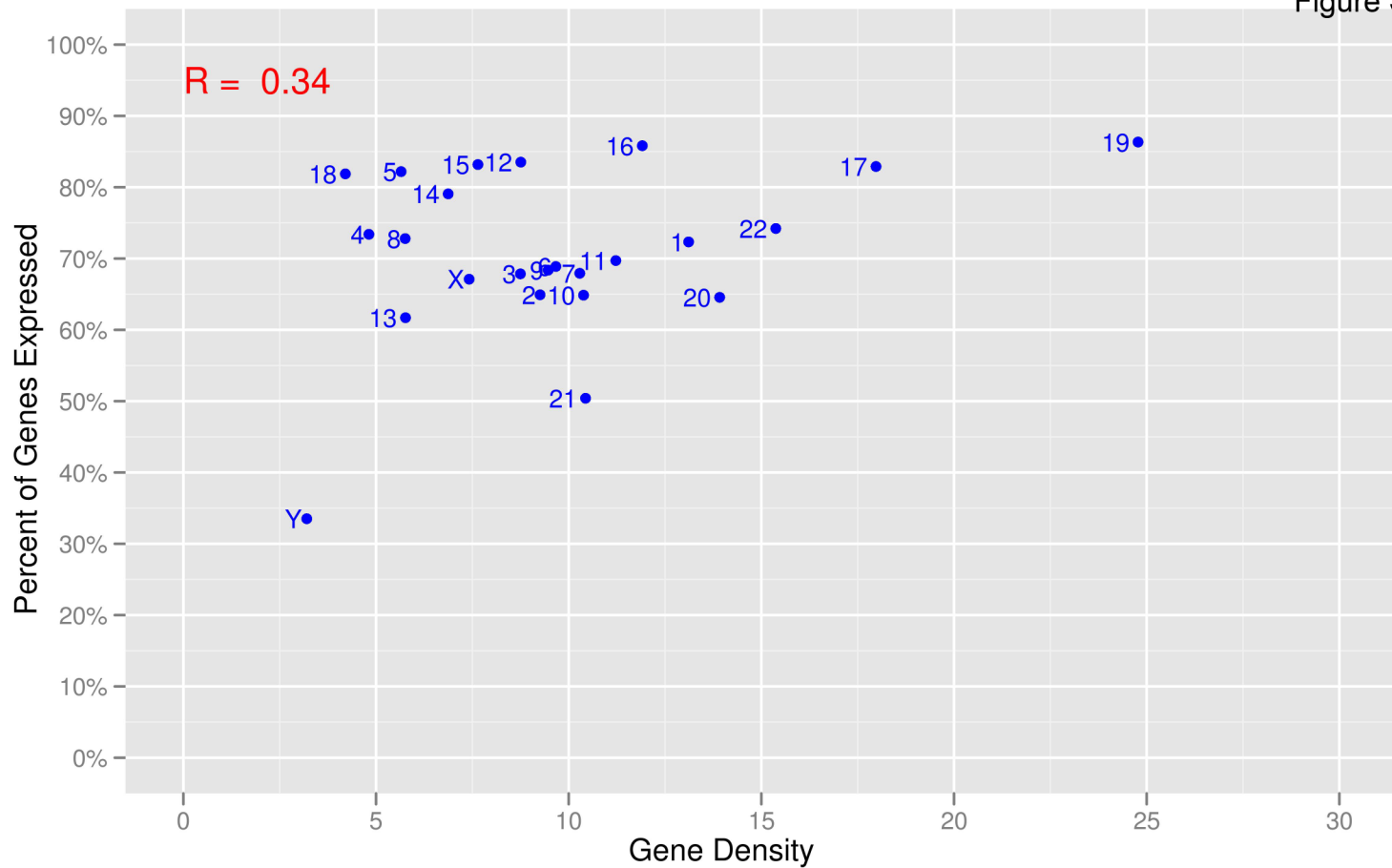


Figure S3

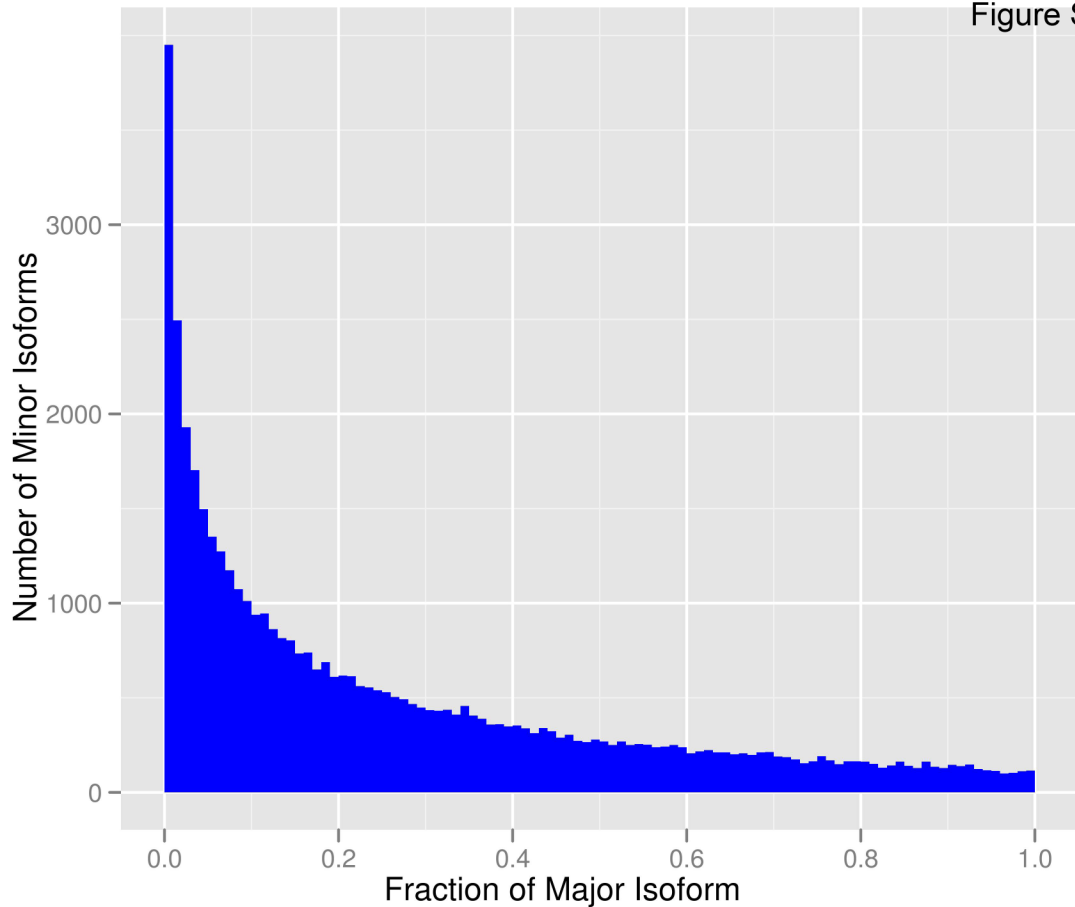


Figure S4

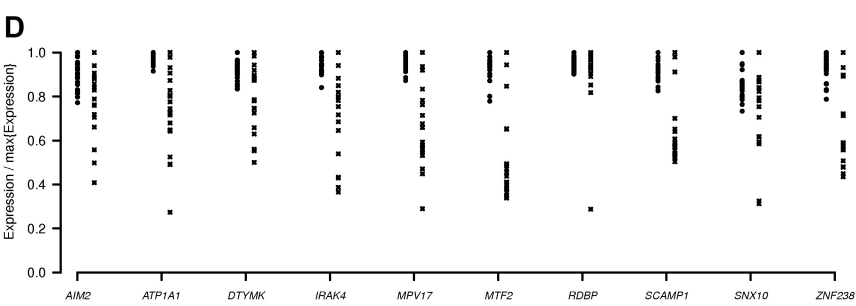
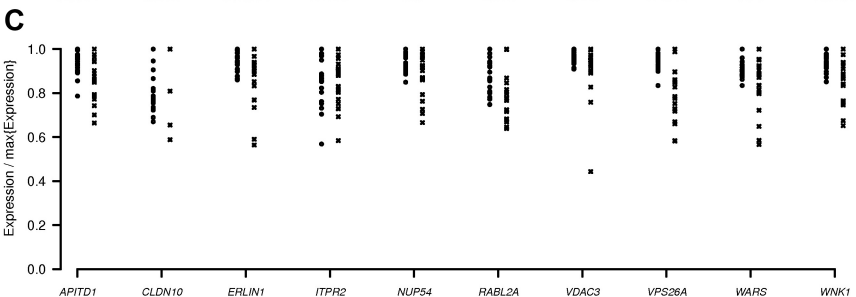
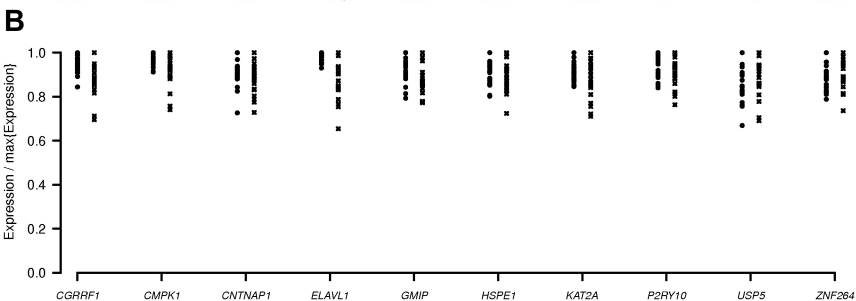
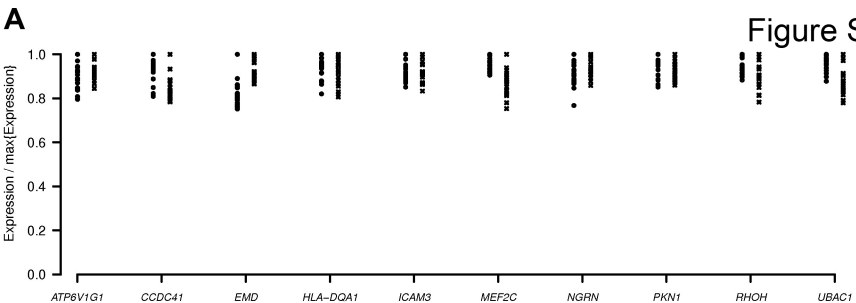
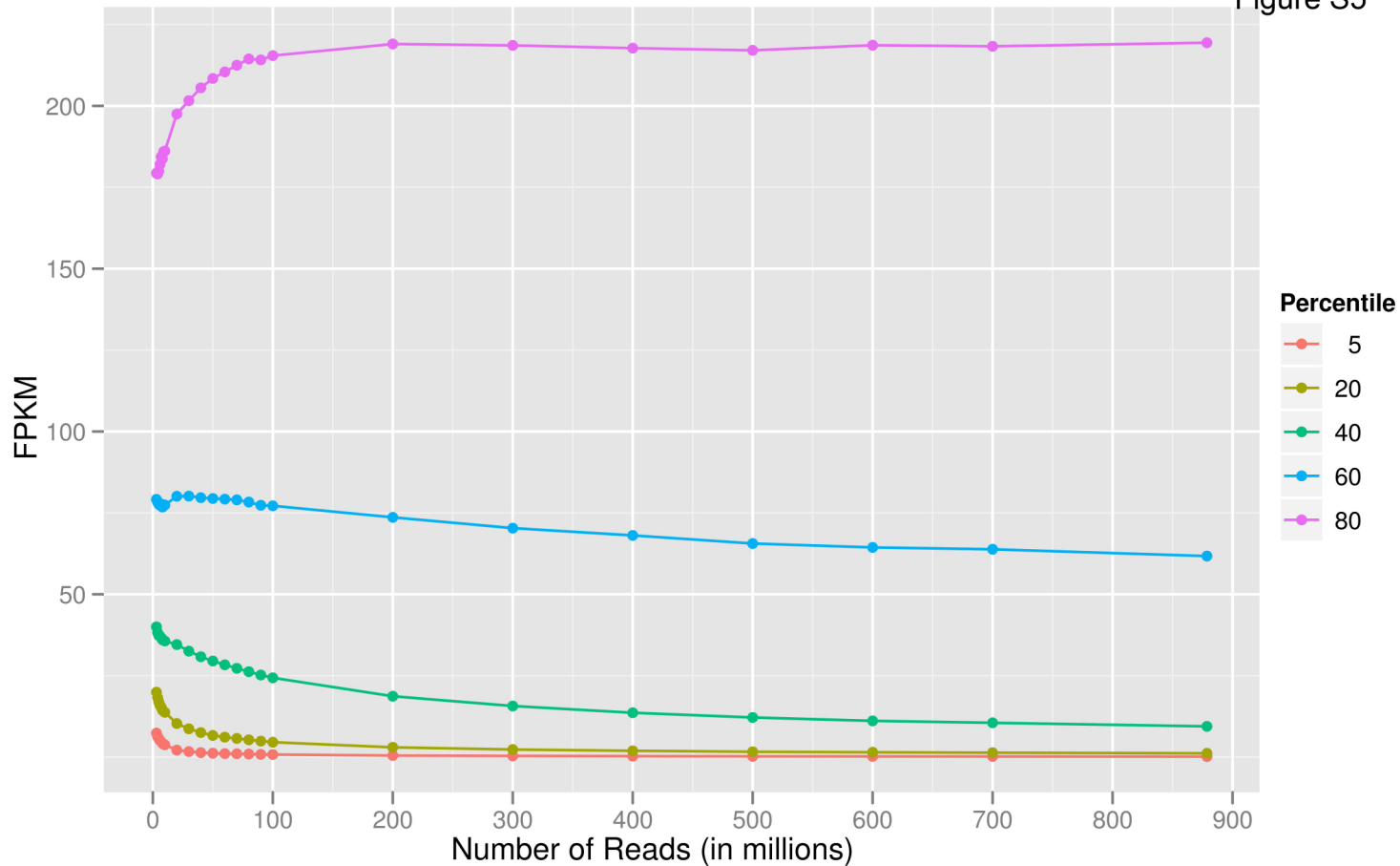


Figure S5



Supplemental Table 1. Alignment Results

Number of Reads (in millions)	1	2	3	4	5	6	7	8	9	10	20	30	40
Unique Aligned	634,176 (84%)	1,277,350 (84%)	1,924,611 (84%)	2,573,536 (84%)	3,222,534 (84%)	3,873,017 (84%)	4,524,251 (84%)	5,176,244 (84%)	5,828,087 (84%)	6,480,455 (84%)	13,174,570 (84%)	19,873,435 (84%)	26,575,527 (84%)
Aligned 2-5 Locations	106,142 (14%)	212,041 (14%)	318,303 (14%)	424,363 (14%)	531,167 (14%)	638,218 (14%)	744,318 (14%)	850,944 (14%)	958,025 (14%)	1,064,761 (14%)	2,210,319 (14%)	3,356,152 (14%)	4,500,716 (14%)
Aligned 6+ Locations	13,069 (2%)	26,482 (2%)	39,815 (2%)	52,914 (2%)	66,192 (2%)	79,356 (2%)	92,881 (2%)	106,215 (2%)	119,635 (2%)	132,856 (2%)	267,439 (2%)	401,932 (2%)	536,913 (2%)
Total Aligned	753,387 (75%)	1,515,873 (76%)	2,282,729 (76%)	3,050,813 (76%)	3,819,893 (76%)	4,590,591 (77%)	5,361,450 (77%)	6,133,403 (77%)	6,905,747 (77%)	7,678,072 (77%)	15,652,328 (78%)	23,631,519 (79%)	31,613,156 (79%)

Number of Reads (in millions)	50	60	70	80	90	100	200	300	400	500	600	700	879
Unique Aligned	33,275,797 (84%)	39,975,008 (84%)	46,672,758 (84%)	53,366,429 (84%)	60,058,715 (84%)	66,749,857 (84%)	133,939,976 (84%)	200,876,315 (84%)	267,789,138 (84%)	334,443,831 (84%)	399,783,258 (84%)	465,915,594 (84%)	585,460,567 (84%)
Aligned 2-5 Locations	5,648,880 (14%)	6,795,093 (14%)	7,940,864 (14%)	9,090,087 (14%)	10,238,900 (14%)	11,388,069 (14%)	22,998,295 (14%)	34,636,304 (14%)	46,370,553 (15%)	58,125,933 (15%)	69,884,210 (15%)	81,691,919 (15%)	103,112,278 (15%)
Aligned 6+ Locations	672,105 (2%)	806,672 (2%)	941,704 (2%)	1,076,557 (2%)	1,211,107 (2%)	1,346,457 (2%)	2,691,499 (2%)	4,038,115 (2%)	5,385,459 (2%)	6,735,498 (2%)	8,081,007 (2%)	9,430,008 (2%)	11,818,647 (2%)
Total Aligned	39,596,782 (79%)	47,576,773 (79%)	55,555,326 (79%)	63,533,073 (79%)	71,508,722 (79%)	79,484,383 (79%)	159,629,770 (80%)	239,550,734 (80%)	319,545,150 (80%)	399,305,262 (80%)	477,748,475 (80%)	557,037,521 (80%)	700,391,492 (80%)

Supplemental Table 2. Gene FPKM Percentiles

	Number of Reads (in millions)												
%-tile	1	2	3	4	5	6	7	8	9	10	20	30	40
1	2.37	1.07	.91	1.05	.86	.92	.76	.73	.72	.73	.47	.36	.33
2	6.34	3.25	3.03	2.72	2.37	2.27	1.97	1.74	1.67	1.61	.97	.77	.63
3	10.27	5.58	4.62	4.25	3.76	3.22	3.06	2.7	2.52	2.35	1.42	1.09	.89
4	12.14	7.28	6.16	5.4	4.73	4.26	4.03	3.51	3.3	3.12	1.77	1.4	1.14
5	13.97	8.79	7.39	6.27	5.67	5.07	4.69	4.25	3.93	3.79	2.15	1.69	1.38
10	21.08	14.07	12.02	10.37	9.18	8.39	7.89	7.4	6.97	6.7	4.29	3.34	2.77
15	26.27	18.51	15.97	14.28	12.74	11.92	11.36	10.57	10.19	9.81	6.92	5.5	4.68
20	31.27	22.57	19.93	18.27	16.89	15.92	15.26	14.42	14.02	13.75	10.31	8.69	7.53
25	36.73	27.04	23.95	22.22	21.31	20.19	19.8	18.92	18.5	18.31	14.75	12.61	11.24
30	42.24	32.16	28.97	26.83	25.98	25.18	24.5	23.75	23.47	23.21	20.41	18.04	16.33
35	48.4	37.22	34.34	32.35	31.38	30.8	30.35	29.43	29.27	29.05	26.67	24.65	23.02
40	55.21	43.57	40.	38.24	37.34	37.15	36.63	36.03	35.85	35.65	34.55	32.54	30.82
45	64.24	50.11	47.51	45.55	44.49	44.3	44.28	43.28	43.39	43.32	42.92	41.86	40.67
50	73.79	57.98	55.65	54.18	52.86	53.28	52.97	52.18	52.2	52.05	52.98	52.32	50.99
55	85.01	68.87	66.67	65.36	63.65	63.98	64.27	63.72	63.81	64.	65.09	64.74	63.93
60	98.44	82.69	79.16	78.26	77.63	77.34	77.7	76.79	77.11	77.42	80.11	80.16	79.67
65	113.84	98.28	95.56	95.48	94.37	94.8	95.81	94.99	95.56	95.49	100.26	100.46	100.22
70	134.93	117.72	116.26	114.85	115.32	115.82	117.5	116.67	117.78	118.	124.26	125.78	126.
75	163.39	142.63	142.4	140.5	141.18	142.46	144.67	143.43	145.45	145.03	155.37	159.07	161.03
80	205.71	180.75	179.32	179.09	179.99	182.05	184.37	183.75	185.96	186.13	197.51	201.62	205.55
85	275.35	246.87	241.01	237.56	237.06	238.33	242.11	240.12	242.86	243.53	258.77	268.17	273.1
90	404.82	361.4	352.3	351.75	351.12	354.22	357.85	355.31	352.65	354.4	379.21	391.38	402.43
95	775.61	682.27	652.83	654.39	643.82	642.11	641.58	640.67	646.29	653.57	702.74	741.	742.82
100	60248.	68269.	73796.	75492.	79666.	83855.	85064.	86583.	89043.	91556.	102240.	109360.	113310.

	Number of Reads (in millions)												
%-tile	50	60	70	80	90	100	200	300	400	500	600	700	879
1	.32	.27	.27	.24	.23	.21	.14	.11	.08	.06	.06	.05	.05
2	.56	.5	.49	.44	.4	.37	.23	.17	.14	.11	.1	.09	.08
3	.78	.71	.67	.61	.54	.5	.31	.23	.18	.15	.13	.12	.1
4	.98	.89	.84	.75	.68	.63	.39	.29	.23	.19	.17	.15	.13
5	1.18	1.06	1.02	.92	.83	.79	.47	.35	.28	.23	.2	.18	.16
10	2.43	2.2	2.03	1.89	1.73	1.63	.99	.75	.61	.51	.45	.41	.35
15	4.09	3.76	3.48	3.23	3.01	2.82	1.79	1.39	1.12	.96	.85	.77	.67
20	6.65	6.11	5.72	5.31	4.91	4.57	2.99	2.32	1.93	1.64	1.48	1.35	1.17
25	10.11	9.46	8.84	8.27	7.66	7.21	4.8	3.79	3.1	2.72	2.44	2.28	1.98
30	14.89	13.97	13.19	12.35	11.6	11.17	7.76	6.08	5.07	4.44	4.05	3.74	3.32
35	21.5	20.41	19.11	18.35	17.25	16.64	12.25	9.86	8.29	7.26	6.67	6.19	5.55
40	29.51	28.33	27.26	26.24	25.21	24.35	18.68	15.68	13.61	12.16	11.12	10.52	9.44
45	39.34	38.37	37.32	36.28	35.25	34.3	28.22	24.12	21.67	19.77	18.53	17.33	16.02
50	50.03	49.7	48.92	48.26	47.34	46.62	40.72	36.61	33.3	31.1	29.38	27.91	26.14
55	63.31	62.9	62.28	61.48	60.7	60.43	56.03	52.14	48.84	46.64	45.08	43.5	41.75
60	79.42	79.22	79.01	78.33	77.33	77.18	73.63	70.32	68.09	65.59	64.39	63.82	61.73
65	99.07	98.86	99.07	98.79	98.07	98.21	95.25	92.71	90.24	88.41	87.39	86.4	85.6
70	125.6	125.25	125.92	126.39	125.62	125.63	124.49	121.57	120.03	118.97	117.	116.75	115.82
75	161.86	161.84	162.7	162.78	161.56	162.49	163.3	161.51	160.62	159.9	159.41	159.36	159.56
80	208.43	210.45	212.48	214.42	214.14	215.44	219.01	218.59	217.74	217.06	218.64	218.31	219.4
85	276.35	279.42	283.24	286.18	287.38	289.77	302.5	304.2	307.1	306.69	307.96	310.97	313.69
90	407.19	412.35	419.11	420.83	420.68	422.53	443.34	447.73	450.01	453.7	455.71	462.5	467.88
95	758.88	769.84	778.06	790.7	793.07	798.76	841.21	849.18	854.14	863.03	868.18	876.93	885.75
100	117420.	120390.	123670.	126340.	128370.	130660.	145420.	152430.	157360.	162110.	166330.	170210.	175780.

Supplemental Table 3. Transcript FPKM Percentiles

	Number of Reads (in millions)												
%-tile	1	2	3	4	5	6	7	8	9	10	20	30	40
1	2.59E-08	1.73E-08	1.42E-08	1.77E-08	1.06E-08	1.05E-08	1.15E-08	1.15E-08	8.94E-09	1.08E-08	1.3E-08	1.28E-08	1.31E-08
2	7.07E-05	4.82E-06	3.07E-07	2.09E-07	8.55E-08	7.77E-08	6.38E-08	7.91E-08	5.64E-08	7.33E-08	7.36E-08	6.65E-08	8.83E-08
3	0.005096	0.001675	0.000223	7.18E-05	1.4E-05	1.11E-05	1.88E-06	8.66E-06	3.26E-06	7.23E-06	4.66E-06	2.25E-06	5.71E-06
4	0.020964	0.010594	0.004673	0.002578	0.000934	0.001117	0.000342	0.000658	0.00028	0.000391	0.000507	0.000342	0.000323
5	0.0508	0.028781	0.017822	0.012866	0.007704	0.008404	0.005121	0.005197	0.003561	0.003851	0.004712	0.003378	0.003589
10	0.40522	0.3065	0.25618	0.22321	0.20114	0.1964	0.17832	0.15913	0.14908	0.14655	0.14888	0.12887	0.12611
15	1.1984	0.85056	0.71821	0.64343	0.5842	0.56031	0.53449	0.49048	0.4756	0.45411	0.41657	0.37268	0.35603
20	2.2635	1.57	1.3272	1.2058	1.0947	1.0434	0.99973	0.93976	0.89963	0.87795	0.7944	0.73301	0.69693
25	3.5767	2.4161	2.0766	1.8864	1.7539	1.6457	1.6029	1.5001	1.4563	1.4368	1.333	1.2473	1.2063
30	5.0815	3.4783	2.9947	2.7346	2.5597	2.4431	2.3505	2.2695	2.1879	2.1609	2.028	1.9379	1.8615
35	6.8275	4.8016	4.1556	3.7965	3.6024	3.4407	3.3463	3.2036	3.1256	3.0942	2.9153	2.8138	2.678
40	8.9026	6.3698	5.5429	5.0852	4.8772	4.7532	4.5906	4.4033	4.2868	4.2317	4.0215	3.9361	3.7734
45	11.328	8.2123	7.2881	6.7284	6.4208	6.2704	6.0252	5.8808	5.7254	5.6382	5.4499	5.3228	5.1227
50	14.148	10.471	9.3612	8.6886	8.3057	8.137	7.8542	7.6727	7.5249	7.4169	7.1516	7.0473	6.8573
55	18.004	13.145	11.856	11.177	10.626	10.344	10.189	9.914	9.7483	9.6334	9.3952	9.2985	9.107
60	22.233	16.745	14.977	14.318	13.705	13.301	13.083	12.741	12.567	12.512	12.179	12.189	11.968
65	27.895	21.194	19.03	18.242	17.448	17.061	16.792	16.447	16.237	16.147	15.982	15.955	15.777
70	35.435	27.042	24.626	23.427	22.461	22.112	21.718	21.368	21.173	21.05	21.089	21.235	20.832
75	45.444	35.276	32.133	30.367	29.282	28.897	28.575	28.144	27.807	27.756	28.226	28.5	28.403
80	60.032	46.479	42.712	40.502	39.156	39.013	38.693	38.172	37.783	37.749	38.648	39.201	39.483
85	83.192	65.687	60.578	58.023	56.271	55.979	54.828	54.596	53.912	54.174	55.17	56.191	56.788
90	121.3	98.475	92.606	90.325	88.087	87.318	86.305	85.766	84.992	84.675	86.487	88.583	89.902
95	235.86	192.72	179.9	173.23	171.5	170.1	168.08	167.43	166.74	165.14	170.46	176.17	179.09
100	60248	68269	73796	75492	79666	83855	85064	86583	89043	91556	102240	109360	113310

	Number of Reads (in millions)												
%-tile	50	60	70	80	90	100	200	300	400	500	600	700	879
1	.32	.27	.27	.24	.23	.21	.14	.11	.08	.06	.06	.05	.05
2	.56	.5	.49	.44	.4	.37	.23	.17	.14	.11	.1	.09	.08
3	.78	.71	.67	.61	.54	.5	.31	.23	.18	.15	.13	.12	.1
4	.98	.89	.84	.75	.68	.63	.39	.29	.23	.19	.17	.15	.13
5	1.18	1.06	1.02	.92	.83	.79	.47	.35	.28	.23	.2	.18	.16
10	2.43	2.2	2.03	1.89	1.73	1.63	.99	.75	.61	.51	.45	.41	.35
15	4.09	3.76	3.48	3.23	3.01	2.82	1.79	1.39	1.12	.96	.85	.77	.67
20	6.65	6.11	5.72	5.31	4.91	4.57	2.99	2.32	1.93	1.64	1.48	1.35	1.17
25	10.11	9.46	8.84	8.27	7.66	7.21	4.8	3.79	3.1	2.72	2.44	2.28	1.98
30	14.89	13.97	13.19	12.35	11.6	11.17	7.76	6.08	5.07	4.44	4.05	3.74	3.32
35	21.5	20.41	19.11	18.35	17.25	16.64	12.25	9.86	8.29	7.26	6.67	6.19	5.55
40	29.51	28.33	27.26	26.24	25.21	24.35	18.68	15.68	13.61	12.16	11.12	10.52	9.44
45	39.34	38.37	37.32	36.28	35.25	34.3	28.22	24.12	21.67	19.77	18.53	17.33	16.02
50	50.03	49.7	48.92	48.26	47.34	46.62	40.72	36.61	33.3	31.1	29.38	27.91	26.14
55	63.31	62.9	62.28	61.48	60.7	60.43	56.03	52.14	48.84	46.64	45.08	43.5	41.75
60	79.42	79.22	79.01	78.33	77.33	77.18	73.63	70.32	68.09	65.59	64.39	63.82	61.73
65	99.07	98.86	99.07	98.79	98.07	98.21	95.25	92.71	90.24	88.41	87.39	86.4	85.6
70	125.6	125.25	125.92	126.39	125.62	125.63	124.49	121.57	120.03	118.97	117.	116.75	115.82
75	161.86	161.84	162.7	162.78	161.56	162.49	163.3	161.51	160.62	159.9	159.41	159.36	159.56
80	208.43	210.45	212.48	214.42	214.14	215.44	219.01	218.59	217.74	217.06	218.64	218.31	219.4
85	276.35	279.42	283.24	286.18	287.38	289.77	302.5	304.2	307.1	306.69	307.96	310.97	313.69
90	407.19	412.35	419.11	420.83	420.68	422.53	443.34	447.73	450.01	453.7	455.71	462.5	467.88
95	758.88	769.84	778.06	790.7	793.07	798.76	841.21	849.18	854.14	863.03	868.18	876.93	885.75
100	117420.	120390.	123670.	126340.	128370.	130660.	145420.	152430.	157360.	162110.	166330.	170210.	175780.