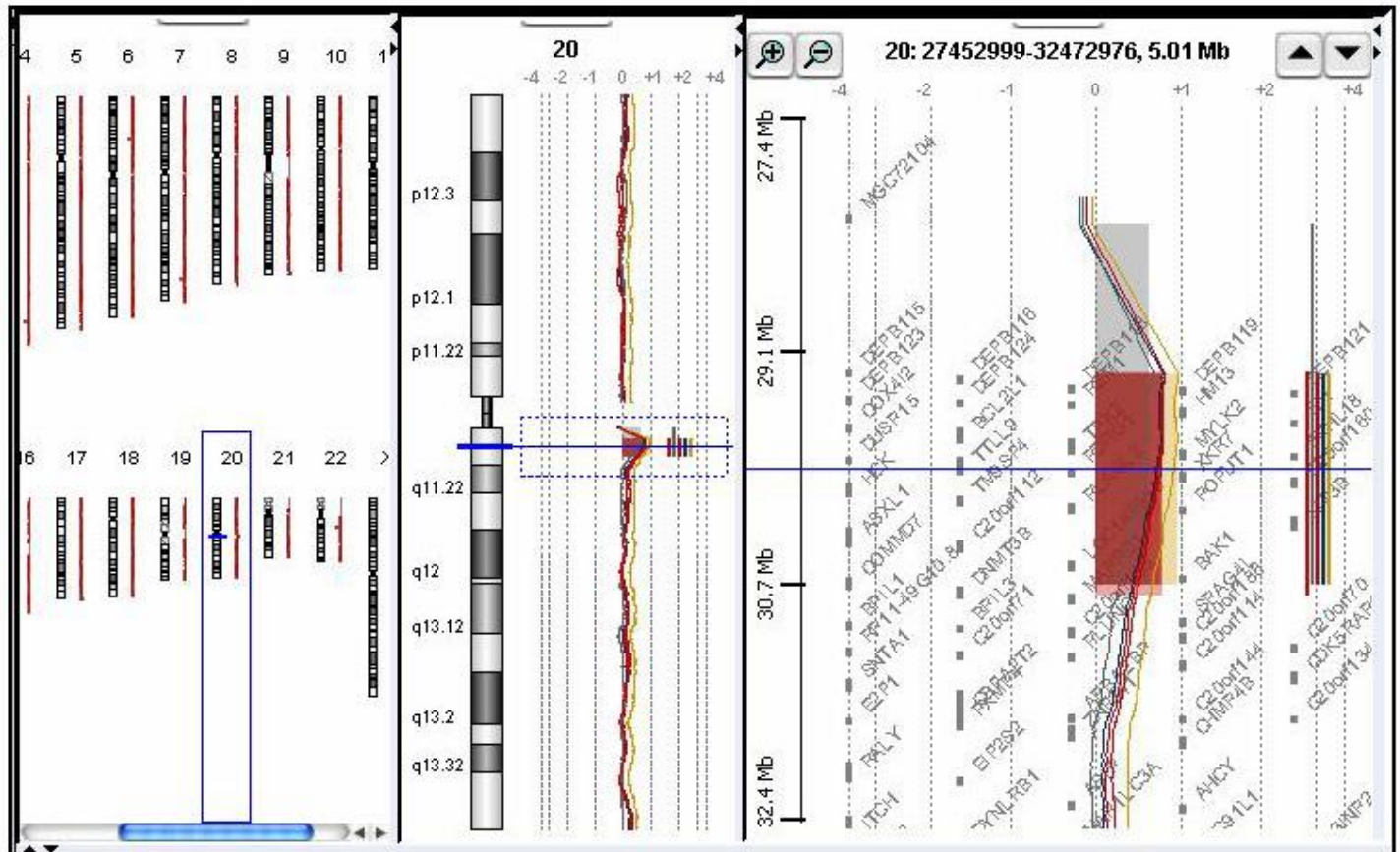


Supplementary Figure 1
(Top)

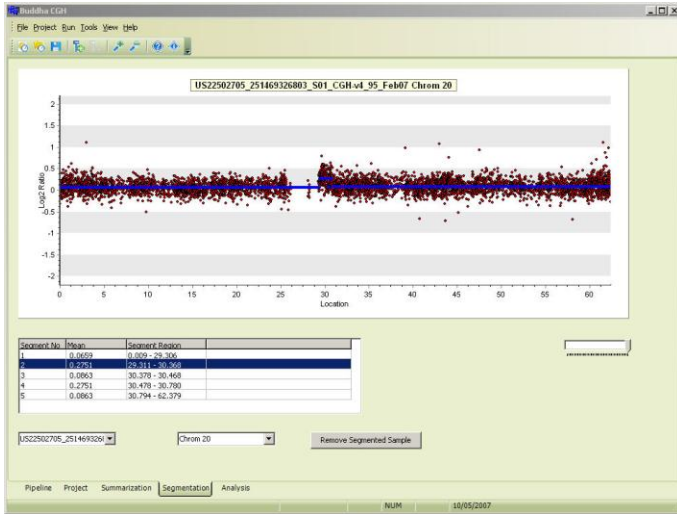
Teitell



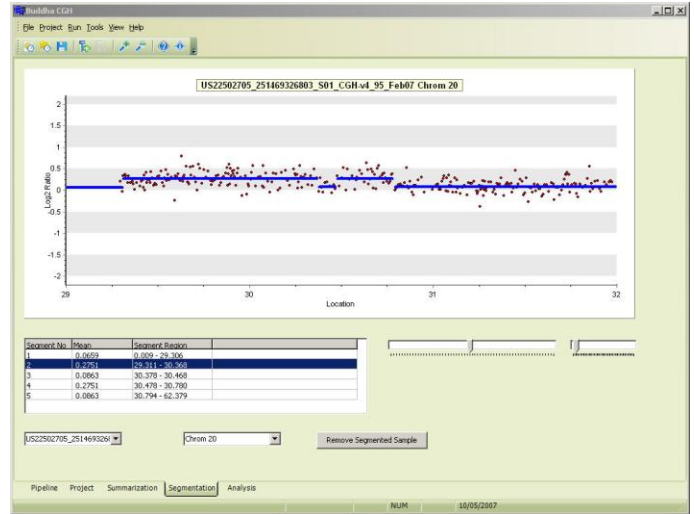
Supplementary Figure 2 (Top)

Teitell

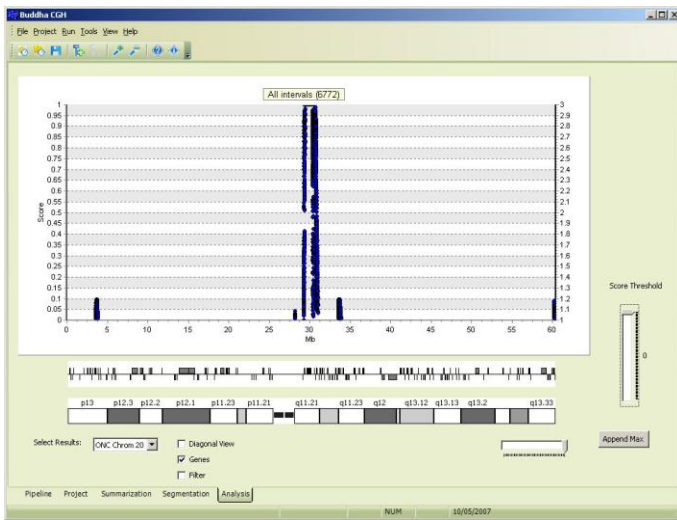
(A)



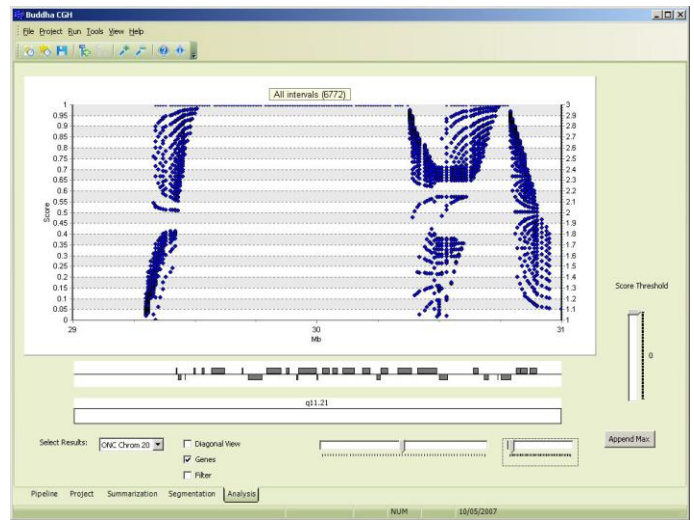
(B)



(C)



(D)



Supplementary Table 1: Genomic intervals scored positively in 3 or 4 of 5 aCGH**replicates with CGHAnalytics 3.4 and/or BuddhaCGH Pipeline software**

<u>hESC</u>	<u>Amp/Del</u>	<u>Chr</u>	<u>Locus</u>	<u>Interval Start</u>	<u>Interval End</u>
HSF1	amp	3	p21.31	48.529999	48.610001
HSF1	amp	3	q29	198.800003	198.919998
HSF1	amp	5	p13.2	37.43	37.549999
HSF1	amp	8	p23.1	6.91	7.79
HSF1	amp	8	q24.3	145.319992	145.479996
HSF1	amp	9	q22.2	90.643816	90.643873
HSF1	amp	9	q34.3	136.679993	136.949997
HSF1	amp	10	q23.31	88.919998	89.270004
HSF1	amp	14	q32.33	105.019997	105.290001
HSF1	amp	16	p13.3	1.19	1.25
HSF1	amp	17	q25.1	69.621638	77.535456
HSF1	amp	17	q25.3	77.5	77.580002
HSF1	amp	19	p13.3	0.55	0.62
HSF1	amp	19	p13.3	1.22	1.31
HSF1	amp	19	p13.3	2.18	2.22
HSF1	amp	19	q13.33	55.580002	55.68
HSF1	amp	20	q11.21	29.309999	30.780001
HSF1	amp	23	q28	152.520004	152.580002
HSF1	del	1	p31.1	83.379997	83.790001
HSF1	del	1	q21.1, q21.2	145.819992	145.990005
HSF1	del	1	q21.3	149.330002	149.440002
HSF1	del	2	q33.1	198.809998	198.919998
HSF1	del	4	q13.2, q13.3	70.329994	70.510002
HSF1	del	4	q26	115.539784	115.539843
HSF1	del	5	q33.1	150.169998	150.25
HSF1	del	6	p21.32	32.59	32.630001
HSF1	del	7	q34	141.210007	141.259995
HSF1	del	8	q22.1	97.729387	98.201516
HSF1	del	8	q22.3	101.953866	103.645145
HSF1	del	22	q11.23	22.67	22.710001
HSF6	amp	1	q21.3	149.380005	149.399994
HSF6	amp	2	q21.1	130.449997	130.789993
HSF6	amp	6	p21.1	29.950805	29.981989
HSF6	amp	6	p21.1	43.07	43.130001
HSF6	amp	7	p22.3	1.059896	1.08453
HSF6	amp	8	p21.2	23.540001	24.73
HSF6	amp	8	p11.22, p11.23	39.420002	39.66
HSF6	amp	9	q34.3	13.6510745	13.6927151
HSF6	amp	11	p15.5	0.274838	0.279571

HSF6	amp	11	q11	55.119999	55.200001
HSF6	amp	12	p13.31	9.45	9.63
HSF6	amp	12	q24.12	110.209999	110.330002
HSF6	amp	14	q23.31	62.836211	62.941618
HSF6	amp	14	q32.33	105.016841	106.002238
HSF6	amp	17	q21.2	36.889999	37.139999
HSF6	amp	17	q25.3	77.169998	77.43
HSF6	amp	19	p13.31	1.24072	2.19845
HSF6	amp	20	p13	1.49	1.58
HSF6	amp	21	q21.1	16.34	16.48
HSF6	amp	22	q13.31	44.659704	44.677115
HSF6	amp	23	p11.22	52.790001	52.91
HSF6	del	1	p31.1	72.440002	72.800003
HSF6	del	1	p31.1	83.209999	83.449997
HSF6	del	2	q33.1	202.690002	202.770004
HSF6	del	4	q13.2	69.270004	69.310005
HSF6	del	4	q13.2, q13.3	70.329994	70.409996
HSF6	del	4	q34.1	173.804227	173.804286
HSF6	del	5	q13.2	69.739998	70.620003
HSF6	del	6	p21.3	31.370001	31.620001
HSF6	del	6	p21.32	32.59	32.630001
HSF6	del	7	p12.1	53.203223	53.357393
HSF6	del	7	q36.1	151.210007	151.520004
HSF6	del	10	q11.22	46.400002	46.57
HSF6	del	10	q22.3	81.260002	81.689995
HSF6	del	14	q11.1, q11.2	19.27	19.5
HSF6	del	14	q24.3	73.030006	73.110001
HSF6	del	15	q11.2	18.657388	19.465418
HSF6	del	19	p12	20.42	20.49
HSF6	del	22	q11.23	22.67	22.710001
HSF6	del	22	q13.1	37.600002	37.700001

CNV intervals detected by both analytic programs with stringent scoring thresholds (8 in ADM-1 for CGHAnalytics and >0.7 for BuddhaCGH Pipeline) are displayed in Tables 1 and 2 in the text.

Supplementary Table 2: Quantitative real-time PCR (qPCR) primer pairs

<u>Location</u>	<u>Gene</u>	<u>CNV</u>	<u>Size (bp)</u>	<u>Primers</u>
CNV Intervals Identified by Both BuddhaCGH Pipeline and CGHAnalytics 3.4				
20q11.21	BCL2L1	HSF1 (Amp)	172	Fwd: aactgggtctcctgacttg Rev: aaggacagtgttgcaaagg
6p21.32	HLA-DRB5	HSF1/HSF6 (Del)	171	Fwd: gccccactctaagaacaac Rev: atggttgcaaaaagtgacc
7q34	MGAM	HSF1 (Del)	175	Fwd: tctgatttcctcaagattg Rev: ctgtgatgacctcctcaag
22q11.23	GSTT1	HSF1/HSF6 (Del)	142	Fwd: caagctgcacgataggcac Rev: atggtggggccagtagaag
1q21.3	LCE3C	HSF6 (Amp)	133	Fwd: atggtctgagggttctgtc Rev: actgggtgagggacaactg
4q13.2	(U06641)	HSF6 (Del)	174	Fwd: gccatgtggaactgtgagtc Rev: ctgcttaaaaatctccacctc
19p12	(AF338193)	HSF6 (Del)	123	Fwd: aaccaggctttccacttac Rev: ttccagaagatccgacataaag
CNV Intervals Identified in 3 or 4 of 5 aCGH Replicates by 1 Analysis Platform (From Supplementary Table 1)				
9q34.3	NOTCH1	HSF1 (Amp)	160	Fwd: aatgcgactccagaaagcag Rev: caccctccttctcatttg
4q34.1	GALNT17	HSF6 (Del)	146	Fwd: gcagcaggcatagaaaaacc Rev: tccacacaaccaaacctg
Control Probes				
Xq28	GABRA3	Chr X control	151	Fwd: tcaacaagtcacacctgaagc Rev: ccacaaatcaagctgagagc
Yq11.22	NLGN4Y	Chr Y control	136	Fwd: tatccatccccatgattctg Rev: tctccctggaaggatacacc
20q11.23	SRC	No change control	102	Fwd: cacacacacacgacagg Rev: tctccctggaaggatacacc