Table S3 Differential expression of specific genes (RPKM) in HESC, ESER, FLER and PBER cells.

	Symbol	Gene Name	HESC	ESER	FLER	PBER
Pluripotency						
NM_002701	POU5F1	Homo sapiens POU class 5 homeobox 1 (POU5F1), transcript variant 1, mRNA	252.38	0	0	0
NM_203289	POU5F1	Homo sapiens POU class 5 homeobox 1 (POU5F1), transcript variant 2, mRNA	139.29	0	0	0
NM_024865	NANOG	Homo sapiens Nanog homeobox (NANOG), mRNA	64.54	0	0.222889	0
NM_003106	SOX2	Homo sapiens SRY (sex determining region Y)-box 2 (SOX2), mRNA	45.9612	0	0	0
NM_030625	TET1	Homo sapiens tet oncogene 1 (TET1), mRNA	23.3937	0.773679	0.552973	0.0871833
Erythropoiesis						
NM_005330	HBE1	Homo sapiens hemoglobin, epsilon 1 (HBE1), mRNA	1.42346	49456.2	168.962	1.30458
NM_000559	HBG1	Homo sapiens hemoglobin, gamma A (HBG1), mRNA	1.05451	26402.3	15929.8	3496.3
NM_000184	HBG2	Homo sapiens hemoglobin, gamma G (HBG2), mRNA	0	11129.4	24333.8	2305.98
NM_000518	HBB	Homo sapiens hemoglobin, beta (HBB), mRNA	0.843411	9.9266	434.803	9519.04
NM_002049	GATA1	Homo sapiens GATA binding protein 1 (globin transcription factor 1) (GATA1), mRNA	0	138.207	39.0474	58.6138
NM_006563	KLF1	Homo sapiens Kruppel-like factor 1 (erythroid) (KLF1), mRNA	0	109.305	66.7339	70.3207
NM_001136023	NFE2	Homo sapiens nuclear factor (erythroid-derived 2), 45kDa (NFE2), transcript variant 2, mRNA	0.561676	174.936	95.3244	46.8577
NM_003189	TAL1	Homo sapiens T-cell acute lymphocytic leukemia 1 (TAL1), mRNA	0	93.8465	44.4529	36.2629
NM_005574	LMO2	Homo sapiens LIM domain only 2 (rhombotin-like 1) (LMO2), transcript variant 1, mRNA	0.218743	54.8054	52.8189	18.2199
NM_001142315	LMO2	Homo sapiens LIM domain only 2 (rhombotin-like 1) (LMO2), transcript variant 2, mRNA	0.314468	75.5893	71.2913	24.8836
NM_001142316	LMO2	Homo sapiens LIM domain only 2 (rhombotin-like 1) (LMO2), transcript variant 3, mRNA	0.358213	72.5501	67.0394	23.0869
NM_033326	SOX6	Homo sapiens SRY (sex determining region Y)-box 6 (SOX6), transcript variant 2, mRNA	0	0.292506	3.52012	6.48302
NM_017508	SOX6	Homo sapiens SRY (sex determining region Y)-box 6 (SOX6), transcript variant 1, mRNA	0	0.286268	3.42994	6.19627
NM_022893	BCL11A	Homo sapiens B-cell CLL/lymphoma 11A (zinc finger protein) (BCL11A), transcript variant 1, mRNA	2.54398	0	0.301471	2.82222
NM_018014	BCL11A	Homo sapiens B-cell CLL/lymphoma 11A (zinc finger protein) (BCL11A), transcript variant 2, mRNA	2.64121	0	0.41351	2.93792
NM_138559	BCL11A	Homo sapiens B-cell CLL/lymphoma 11A (zinc finger protein) (BCL11A), transcript variant 3, mRNA	2.56375	0	0.627989	1.97847
Cell proliferation						
NM_001039535	SKA1	Homo sapiens spindle and kinetochore associated complex subunit 1 (SKA1), transcript variant 1, mRNA	5.18422	4.09181	10.7916	5.91805
NM_145060	SKA1	Homo sapiens spindle and kinetochore associated complex subunit 1 (SKA1), transcript variant 2, mRNA	5.12686	4.11151	10.6327	5.8892
NM_145061	SKA3	Homo sapiens spindle and kinetochore associated complex subunit 3 (SKA3), transcript variant 1, mRNA	14.6711	1.54495	3.13042	2.00115
NM_031966	CCNB1	Homo sapiens cyclin B1 (CCNB1), mRNA	41.8265	12.9257	38.7634	11.8548
NM_001237	CCNA2	Homo sapiens cyclin A2 (CCNA2), mRNA	30.6256	17.2428	47.1297	26.2794
NM_001002244	ANAPC11	Homo sapiens anaphase promoting complex subunit 11 (ANAPC11), transcript variant 1, mRNA	10.9099	5.53926	12.2078	3.38909
NM_016476	ANAPC11	Homo sapiens anaphase promoting complex subunit 11 (ANAPC11), transcript variant 2, mRNA	13.081	6.76532	16.0766	4.21529
NM_001002245	ANAPC11	Homo sapiens anaphase promoting complex subunit 11 (ANAPC11), transcript variant 3, mRNA	14.3393	7.43225	17.2651	4.44449
NM_001002246	ANAPC11	Homo sapiens anaphase promoting complex subunit 11 (ANAPC11), transcript variant 4, mRNA	13.475	6.9263	16.6361	4.28122
NM_001002247	ANAPC11	Homo sapiens anaphase promoting complex subunit 11 (ANAPC11), transcript variant 5, mRNA	14.1971	7.35858	17.0939	4.40043
NM_001002248	ANAPC11	Homo sapiens anaphase promoting complex subunit 11 (ANAPC11), transcript variant 6, mRNA	13.3511	6.86261	16.4832	4.24185
NM_001002249	ANAPC11	Homo sapiens anaphase promoting complex subunit 11 (ANAPC11), transcript variant 7, mRNA	12.5077	6.41285	14.7195	3.95282
NM_152562	CDCA2	Homo sapiens cell division cycle associated 2 (CDCA2), mRNA	12.1846	3.03735	7.54226	7.52458
NM_031299	CDCA3	Homo sapiens cell division cycle associated 3 (CDCA3), mRNA	10.379	9.27313	27.0447	9.99821
Cell communication						
NM_007368	RASA3	Homo sapiens RAS p21 protein activator 3 (RASA3), mRNA	4.01638	1.97946	0.705142	1.7905
NM_004658	RASAL1	Homo sapiens RAS protein activator like 1 (GAP1 like) (RASAL1), mRNA	0.726727	0.123301	0	0
NM_004296	RGS6	Homo sapiens regulator of G-protein signaling 6 (RGS6), mRNA	0.0644321	3.58151	0.190222	0.424872
NM_012419	RGS17	Homo sapiens regulator of G-protein signaling 17 (RGS17), mRNA	2.16088	0.306542	0	0
NM_182982	GRK4	Homo sapiens G protein-coupled receptor kinase 4 (GRK4), transcript variant 1, mRNA	0.0912663	0.0971025	0	0
NM_001004056	GRK4	Homo sapiens G protein-coupled receptor kinase 4 (GRK4), transcript variant 2, mRNA	0.0952165	0.101305	0	0
NM_001004057	GRK4	Homo sapiens G protein-coupled receptor kinase 4 (GRK4), transcript variant 3, mRNA	0.0970543	0.0885091	0	0
Membranes and organelles						
NM_002520	NPM1	Homo sapiens nucleophosmin (nucleolar phosphoprotein B23, numatrin) (NPM1), transcript variant 1, mRNA	103.823	38.2518	50.5035	12.7063
NM_199185	NPM1	Homo sapiens nucleophosmin (nucleolar phosphoprotein B23, numatrin) (NPM1), transcript variant 2, mRNA	109.182	40.7664	55.0746	13.8321
NM_001037738	NPM1	Homo sapiens nucleophosmin (nucleolar phosphoprotein B23, numatrin) (NPM1), transcript variant 3, mRNA	111.738	59.2111	51.4404	17.1453
NM_001620	AHNAK	Homo sapiens AHNAK nucleoprotein (AHNAK), transcript variant 1, mRNA	8.30197	1.15841	3.01557	1.23236
NM_024060	AHNAK	Homo sapiens AHNAK nucleoprotein (AHNAK), transcript variant 2, mRNA	1.76799	0	1.00102	0.447168
NM_138400	NOM1	Homo sapiens nucleolar protein with MIF4G domain 1 (NOM1), mRNA	3.47958	0.792314	1.80831	0.882268
NM_198887	NUP43	Homo sapiens nucleoporin 43kDa (NUP43), transcript variant 1, mRNA	17.59	8.11659	9.41803	4.63238
NM_016391	NOP16	Homo sapiens NOP16 nucleolar protein homolog (yeast) (NOP16), mRNA	6.14497	2.15191	11.0302	0.648328

NM_017547	FOXRED1	Homo sapiens FAD-dependent oxidoreductase domain containing 1 (FOXRED1), mRNA	11.6366	10.2007	8.1492	3.28344
NM_005004	NDUFB8	Homo sapiens NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 8, 19kDa (NDUFB8), mRNA	47.1791	20.8224	23.1765	7.71416
NM_014342	MTCH2	Homo sapiens mitochondrial carrier homolog 2 (C. elegans) (MTCH2), nuclear gene encoding mitochondrial protein, mRNA	4.39269	5.3931	8.15251	3.34653
NM_001688	ATP5F1	Homo sapiens ATP synthase, H+ transporting, mitochondrial F0 complex, subunit B1 (ATP5F1), nuclear gene encoding mitochondrial protein, mRNA	13.4318	9.94605	17.954	4.90495
NM_013365	GGA1	Homo sapiens golgi associated, gamma adaptin ear containing, ARF binding protein 1 (GGA1), transcript variant 1, mRNA	4.96344	5.92272	1.21699	1.19823
NM_001001560	GGA1	Homo sapiens golgi associated, gamma adaptin ear containing, ARF binding protein 1 (GGA1), transcript variant 2, mRNA	4.66131	5.12116	1.24612	1.21012
NM_001001561	GGA1	Homo sapiens golgi associated, gamma adaptin ear containing, ARF binding protein 1 (GGA1), transcript variant 3, mRNA	1.22966	1.13559	1.24074	0.574779
NM_020399	GOPC	Homo sapiens golgi associated PDZ and coiled-coil motif containing (GOPC), transcript variant 1, mRNA	4.67986	4.18414	2.86146	0.998394
NM_001017408	GOPC	Homo sapiens golgi associated PDZ and coiled-coil motif containing (GOPC), transcript variant 2, mRNA	4.70439	4.20607	2.87646	1.00363
NM_152281	GORAB	Homo sapiens golgin, RAB6-interacting (GORAB), transcript variant 1, mRNA	2.92246	0.675466	0.249569	0
NM_016548	GOLM1	Homo sapiens golgi membrane protein 1 (GOLM1), transcript variant 1, mRNA	14.0227	1.74158	15.0276	7.05805
NM_177937	GOLM1	Homo sapiens golgi membrane protein 1 (GOLM1), transcript variant 2, mRNA	14.1487	1.76045	15.3187	7.24888
NM_020909	EPB41L5	Homo sapiens erythrocyte membrane protein band 4.1 like 5 (EPB41L5), mRNA	5.16673	0.961997	0	0.0638811
NM_152468	TMC8	Homo sapiens transmembrane channel-like 8 (TMC8), mRNA	0.077661	0.929783	0.687833	2.66294
NM_002294	LAMP2	Homo sapiens lysosomal-associated membrane protein 2 (LAMP2), transcript variant A, mRNA	2.49242	3.05012	1.14752	2.52606
NM_001122606	LAMP2	Homo sapiens lysosomal-associated membrane protein 2 (LAMP2), transcript variant C, mRNA	3.53203	4.37173	1.43327	3.9529
NM_013995	LAMP2	Homo sapiens lysosomal-associated membrane protein 2 (LAMP2), transcript variant B, mRNA	6.50085	9.78032	2.83198	9.45387
NM_005506	SCARB2	Homo sapiens scavenger receptor class B, member 2 (SCARB2), mRNA	9.52424	0.57465	0.689415	2.25844
NM_012434	SLC17A5	Homo sapiens solute carrier family 17 (anion/sugar transporter), member 5 (SLC17A5), mRNA	2.72431	0.842679	0.164622	0.735385
NM_198098	AQP1	Homo sapiens aquaporin 1 (Colton blood group) (AQP1), mRNA	0.0479281	1.23549	1.35837	14.7655
Cell adhesion, migration or cell-cell interaction						
NM_000610	CD44	Homo sapiens CD44 molecule (Indian blood group) (CD44), transcript variant 1, mRNA	4.29233	3.70161	1.78118	5.00484
NM_001001389	CD44	Homo sapiens CD44 molecule (Indian blood group) (CD44), transcript variant 2, mRNA	4.37702	3.78684	1.82219	5.09521
NM_001001390	CD44	Homo sapiens CD44 molecule (Indian blood group) (CD44), transcript variant 3, mRNA	4.82433	4.18547	2.01682	5.65703
NM_001001391	CD44	Homo sapiens CD44 molecule (Indian blood group) (CD44), transcript variant 4, mRNA	4.46979	4.4697	2.17387	6.05416
NM_001001392	CD44	Homo sapiens CD44 molecule (Indian blood group) (CD44), transcript variant 5, mRNA	3.92423	3.71216	2.16	5.3157
NM_001904	CTNNB1	Homo sapiens catenin (cadherin-associated protein), beta 1, 88kDa (CTNNB1), transcript variant 1, mRNA	71.7025	25.8089	8.42219	4.19561
NM_001098209	CTNNB1	Homo sapiens catenin (cadherin-associated protein), beta 1, 88kDa (CTNNB1), transcript variant 2, mRNA	74.5582	26.3938	8.26152	4.42272
NM_001098210	CTNNB1	Homo sapiens catenin (cadherin-associated protein), beta 1, 88kDa (CTNNB1), transcript variant 3, mRNA	76.6667	26.9926	8.40166	4.56528
NM_002211	ITGB1	Homo sapiens integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12) (ITGB1), transcript variant 1A, mRNA	53.8462	10.1717	14.1621	33.3087
NM_033666	ITGB1	Homo sapiens integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12) (ITGB1), transcript variant 1B, mRNA	54.9484	10.9915	14.878	36.4881
NM_033667	ITGB1	Homo sapiens integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12) (ITGB1), transcript variant 1C-1, mRNA	55.3074	10.5677	14.5565	34.3004
NM_033669	ITGB1	Homo sapiens integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12) (ITGB1), transcript variant 1C-2, mRNA	55.6186	10.6284	14.6399	34.4878
NM_033668	ITGB1	Homo sapiens integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12) (ITGB1), transcript variant 1D, mRNA	55.9085	10.6285	14.7196	34.5583
NM_133376	ITGB1	Homo sapiens integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12) (ITGB1), transcript variant 1E, mRNA	55.0175	10.4339	14.4649	33.9882
NM_000484	APP	Homo sapiens amyloid beta (A4) precursor protein (APP), transcript variant 1, mRNA	120.72	9.3811	1.82647	6.37367
NM_201413	APP	Homo sapiens amyloid beta (A4) precursor protein (APP), transcript variant 2, mRNA	121.945	9.5129	1.85564	6.47543
NM_201414	APP	Homo sapiens amyloid beta (A4) precursor protein (APP), transcript variant 3, mRNA	121.503	9.16179	1.69527	6.50866
NM_001136129	APP	Homo sapiens amyloid beta (A4) precursor protein (APP), transcript variant 5, mRNA	116.728	8.85909	1.76033	6.50631
NM_001136130	APP	Homo sapiens amyloid beta (A4) precursor protein (APP), transcript variant 6, mRNA	116.217	9.10888	1.89375	6.36483
Others						
NM_000584	IL8	Homo sapiens interleukin 8 (IL8), mRNA	0.431196	0.679659	0	1.89556
NM_005931	MICB	Homo sapiens MHC class I polypeptide-related sequence B (MICB), mRNA	2.42035	0.282522	0.705422	1.8641