

Table S1 - Sample quality control and alignment statistics

Sample Type	Sample ID	Female ID	Sex	Num. of Oocytes or Embryos	Kit	PF Reads	%Q>=30	Avg Q	Exonic Reads	Cor (SPIA vs. SOLO)	Total PF Reads	Total Aligned Reads	Total Exonic Reads
MII	020516_05	39229	N/A	2	SPIA	61,305,617	94%	36.19	22,228,611	N/A	61,305,617	56,625,719	22,228,611
	020516_06	39229	N/A	2	SPIA	75,383,490	93%	36.06	28,817,021	N/A	75,383,490	69,847,572	28,817,021
	021916_01	38276	N/A	2	SPIA	72,705,254	92%	35.93	26,550,477	0.959	105,318,703	9,891,733	44,064,149
					SOLO	32,613,449	96%	38.97	17,513,672				
	021916_02	38276	N/A	2	SPIA	60,974,052	93%	36.16	26,985,725	N/A	60,974,052	55,993,706	26,985,725
	110515_02	40052	N/A	2	SPIA	62,750,747	92%	35.80	24,706,186	N/A	62,750,747	56,288,090	24,706,186
	111815_02	37704	N/A	2	SPIA	61,480,835	92%	35.86	23,845,020	0.947	103,488,690	95,348,150	45,403,637
					SOLO	42,007,855	96%	39.00	21,558,617				
120115_01	39608	N/A	2	SPIA	66,242,841	93%	36.09	22,345,345	0.942	97,408,778	92,813,946	38,476,978	
				SOLO	31,165,937	96%	39.02	16,131,633					
120115_02	39608	N/A	2	SPIA	63,682,810	93%	36.13	26,570,592	N/A	63,682,810	58,796,270	26,570,592	
8-cell	011516_02	37704	F	1	SPIA	31,157,832	94%	36.30	9,438,847	N/A	31,157,832	28,210,213	9,438,847
	011516_03	37704	F	1	SPIA	64,799,593	93%	36.10	15,878,837	N/A	64,799,593	57,322,741	15,878,837
	020816_06	39229	M	1	SPIA	74,412,910	95%	37.98	11,467,364	0.878	108,399,672	87,342,392	22,778,741
					SOLO	33,986,762	96%	38.98	11,311,377				
	020816_07	39229	M	1	SPIA	93,021,283	93%	36.05	18,380,197	0.877	129,334,455	114,490,675	30,598,252
					SOLO	36,313,172	96%	38.97	12,218,055				
	020816_08	39229	M	1	SPIA	25,134,429	94%	36.20	2,980,569	0.824	60,225,777	54,367,421	14,009,165
					SOLO	35,091,348	96%	39.05	11,028,596				
	020816_09	39229	F	1	SPIA	57,839,729	94%	36.18	16,468,320	N/A	57,839,729	52,047,615	16,468,320
	020816_10	39229	F	1	SPIA	79,688,554	96%	37.97	17,444,011	N/A	79,688,554	61,407,856	17,444,011
	112015_01	37704	?	1	SPIA	66,105,810	93%	36.01	17,340,681	N/A	66,105,810	59,124,698	17,340,681
	112015_02	37704	?	1	SPIA	67,148,890	93%	36.08	18,373,308	N/A	67,148,890	58,654,154	18,373,308
112815_01	38783	F	1	SPIA	34,102,110	94%	36.32	8,760,108	N/A	34,102,110	31,018,103	8,760,108	
112815_02	38783	M	1	SPIA	29,061,974	95%	36.44	5,952,428	0.889	67,964,021	52,425,934	16,319,584	
				SOLO	38,902,047	96%	38.95	10,367,156					
Morula	020816_02	40232	M	1	SPIA	26,924,277	94%	36.19	5,849,864	N/A	26,924,277	24,447,847	5,849,864
	020816_03	40232	M	1	SPIA	30,703,326	94%	36.29	5,068,330	N/A	30,703,326	21,964,495	5,068,330
	020816_04	40232	M	1	SPIA	83,843,998	95%	36.36	16,830,364	N/A	83,843,998	53,775,155	16,830,364
	021016_02	39229	M	1	SPIA	31,342,937	94%	36.23	3,728,520	0.934	73,678,995	67,676,888	19,089,358
					SOLO	42,336,058	96%	38.99	15,360,838				
	021016_03	39229	F	1	SPIA	30,193,265	95%	36.41	4,326,530	0.923	54,055,290	48,368,508	14,136,191
					SOLO	23,862,025	96%	38.94	9,809,661				
	021016_04	39229	F	1	SPIA	32,190,001	95%	36.39	8,969,317	N/A	32,190,001	28,910,155	8,969,317
	022416_02	38276	F	1	SPIA	33,095,670	95%	36.45	4,935,720	0.897	65,699,469	60,355,875	18,289,885
					SOLO	32,603,799	96%	38.96	13,354,165				
	022416_03	38276	F	1	SPIA	31,753,884	95%	36.39	10,513,922	N/A	31,753,884	29,471,733	10,513,922
	022916_01	39026	?	1	SPIA	26,935,119	94%	36.24	1,773,735	0.924	71,694,811	62,222,364	15,066,742
				SOLO	44,759,692	96%	38.99	13,293,007					
022916_02	39026	?	1	SPIA	93,407,780	94%	36.26	21,044,692	N/A	93,407,780	80,124,910	21,044,692	
022916_03	39026	F	1	SPIA	63,922,965	93%	36.11	20,117,989	N/A	63,922,965	56,850,354	20,117,989	
Exp. Blast	111215_01	40052	M	1	SPIA	30,800,931	94%	36.27	3,155,120	0.946	56,474,447	53,661,307	12,324,165
					SOLO	25,673,516	96%	39.03	9,169,045				
	111215_02	40052	M	1	SPIA	69,830,253	96%	38.02	11,676,340	N/A	69,830,253	52,884,834	11,676,340
	111215_03	40052	F	1	SPIA	29,224,153	95%	36.44	2,978,080	0.9	60,245,599	58,111,350	17,401,788
					SOLO	31,021,446	96%	39.01	14,423,708				
	111715_01	39670	F	1	SPIA	32,824,118	95%	36.51	3,399,895	0.966	74,486,294	59,856,211	13,746,677
					SOLO	41,662,176	96%	39.03	10,346,782				
	111715_02	39670	M	1	SPIA	29,097,108	95%	36.45	3,637,744	0.909	68,054,186	64,097,230	16,740,432
					SOLO	38,957,078	96%	38.96	13,102,688				
	111715_03	40232	?	1	SPIA	26,704,365	94%	36.26	4,846,910	N/A	26,704,365	24,475,787	4,846,910
	111715_04	40232	F	1	SPIA	32,321,009	96%	36.57	3,367,982	0.959	74,515,347	68,214,105	17,064,067
					SOLO	42,194,338	96%	39.00	13,696,085				
	112415_01	37704	M	1	SPIA	28,121,370	94%	36.29	5,408,647	N/A	28,121,370	26,129,354	5,408,647
	112415_02	37704	F	1	SPIA	30,137,449	94%	36.25	5,938,871	N/A	30,137,449	27,861,313	5,938,871
	112415_03	37704	M	1	SPIA	34,335,536	96%	36.58	4,298,681	0.914	66,418,326	63,614,550	16,513,169
					SOLO	32,082,790	96%	38.96	12,214,488				
112415_04	37704	?	1	SPIA	33,863,220	95%	36.47	7,843,349	N/A	33,863,220	31,805,983	7,843,349	
112515_03	40422	M	1	SPIA	30,553,407	95%	36.46	9,455,230	N/A	30,553,407	28,203,224	9,455,230	
112515_04	40422	F	1	SPIA	33,776,668	95%	36.46	9,278,516	N/A	33,776,668	31,674,286	9,278,516	