

Supplementary Table 8. Morphokinetic differences between seeded blastocysts that gave rise to embryonic stem cell lines (ESCs) and those that failed in each group.

Parameter	Group							
	ICSI		SCNT-NT		SCNT-PsA		SCNT-VitC	
	ESCs	No ESCs	ESCs	No ESCs	ESCs	No ESCs	ESCs	No ESCs
Time point	Median (Q1, Q3) in min							
PNd	977 (947, 1002)	937 (912, 987)	908 (898, 918)	900 (882, 927)	960 (930, 983)	1011 (961, 1045)	880 (827, 932)	881 (821, 910)
div1-b	80 (60, 85) ^a	90 (85, 95) ^b	95 (95, 95)	90 (85, 95)	93 (82.5, 105)	88 (70, 105)	95 (75, 105)	94 (80, 100)
div1-e	95 (70, 95)	100 (95, 105)	103 (100, 105)	100 (90, 105)	111 (96, 118)	100 (78, 122)	100 (95, 115)	102 (95, 115)
Na	130 (95, 145)	140 (125, 160)	135 (135, 135)	140 (130, 155)	154 (136, 175)	140 (117, 193)	137 (130, 168)	157 (140, 189)
div2-b	1275 (1270, 1275)	1310 (1240, 1335)	1495 (1450, 1540)	1470 (1415, 1565)	1606 (1486, 1690)	1660 (1517, 1776)	1462 (1387, 1609)	1458 (1417, 1529)
div2-e	1280 (1275, 1280)	1315 (1250, 1340)	1500 (1455, 1545)	1485 (1425, 1570)	1614 (1494, 1700)	1670 (1527, 1783)	1467 (1397, 1619)	1472 (1434, 1534)
div3-b	1375 (1300, 1390)	1345 (1265, 1415)	1625 (1580, 1670)	1560 (1485, 1765)	1750 (1617, 1810)	1802 (1692, 1995)	1577 (1437, 1712)	1547 (1502, 1647)
div3-e	1380 (1310, 1400)	1350 (1270, 1420)	1633 (1590, 1675)	1565 (1495, 1770)	1757 (1622, 1818)	1810 (1697, 2000)	1582 (1442, 1717)	1555 (1522, 1657)
div4-b	2090 (2080, 2095)	2045 (2000, 2250)	2560 (2560, 2560)	2390 (2240, 2500)	2459 (2357, 2622)	2570 (2430, 2642)	2302 (2162, 2377)	2247 (2147, 2387)
div4-e	2095 (2085, 2100)	2050 (2005, 2255)	2565 (2565, 2565)	2405 (2245, 2510)	2466 (2362, 2627)	2575 (2438, 2647)	2312 (2172, 2382)	2267 (2157, 2397)
div5-b	2110 (2105, 2115)	2083 (2020, 2215)	2570 (2570, 2570)	2450 (2360, 2680)	2595 (2479, 2795)	2600 (2430, 2790)	2337 (2207, 2497)	2297 (2237, 2457)
div5-e	2120 (2115, 2120)	2090 (2025, 2220)	2575 (2575, 2575)	2465 (2365, 2685)	2605 (2484, 2805)	2605 (2440, 2795)	2342 (2217, 2507)	2302 (2242, 2487)
div6-b	2150 (2140, 2185)	2160 (2040, 2283)	2580 (2580, 2580)	2520 (2420, 2700)	2656 (2505, 2780)	2685 (2609, 2889)	2402 (2197, 2580)	2353 (2302, 2492)
div6-e	2155 (2145, 2195)	2165 (2045, 2290)	2585 (2585, 2585)	2530 (2425, 2705)	2664 (2510, 2785)	2695 (2614, 2894)	2415 (2210, 2585)	2358 (2307, 2502)
div7-b	2210 (2205, 2240)	2235 (2100, 2360)	2590 (2590, 2590)	2653 (2523, 2780)	2671 (2559, 2894)	2759 (2650, 2939)	2362 (2257, 2477)	2403 (2312, 2534)
div7-e	2215 (2210, 2245)	2240 (2105, 2365)	2595 (2595, 2595)	2658 (2528, 2785)	2679 (2564, 2904)	2764 (2655, 2944)	2375 (2267, 2487)	2411 (2317, 2539)
comp-b	2275 (2275, 2370)	2385 (2140, 2500)	2410 (2340, 2480)	2480 (2280, 2645)	2501 (2408, 2630)	2708 (2270, 2793)	2417 (2266, 2537)	2382 (2204, 2492)
comp<8C-b	-	2578 (2305, 2723)	2410 (2340, 2480)	2410 (2230, 2505)	2442 (2382, 2565)	2495 (2215, 2755)	2237 (2055, 2497)	2235 (2153, 2391)

comp8C-b	2275 (2275, 2370)	2335 (2140, 2475)	-	2638 (2530, 2720)	2695 (2695, 2695)	2814 (2775, 3019)	2485 (2382, 2537)	2444 (2407, 2547)
comp-e	2545 (2505, 2560)	2610 (2450, 2765)	2908 (2815, 3000)	2805 (2720, 2915)	2960 (2846, 3065)	2988 (2867, 3157)	2719 (2567, 2997)	2622 (2539, 2784)
cav-b	4255 (4020, 4265)	4115 (3965, 4495)	4340 (4300, 4380)	4270 (3980, 4425)	4090 (3999, 4420)	4330 (4201, 4575)	4193 (3982, 4522)	4049 (3817, 4352)
cav-e	4490 (4215, 4550)	4498 (4285, 4955)	5105 (4935, 5275)	5135 (4570, 5520)	4443 (4236, 4867)	4778 (4557, 4879)	4892 (4547, 5272)	4583 (4389, 5312)
Duration	Median (Q1, Q3) in min							
1-cell stage	80 (60, 85) ^a	90 (85, 95) ^b	95 (95, 95)	90 (85, 95)	93 (82.5, 105)	88 (70, 105)	95 (75, 105)	94 (80, 100)
div1	10 (10, 15) ^a	10 (5, 10) ^b	7.5 (5, 10)	10 (5, 10)	10 (5, 15)	10 (5, 10)	10 (5, 10)	7.5 (5, 25)
cycle1	95 (70, 95)	100 (95, 105)	103 (100, 105)	100 (90, 105)	111 (96, 118)	100 (78, 122)	100 (95, 115)	102 (95, 115)
2-cell stage	1175 (1170, 1205)	1215 (1140, 1240)	1393 (1350, 1435)	1375 (1305, 1485)	1510 (1388, 1573)	1558 (1420, 1643)	1377 (1292, 1415)	1357 (1285, 1422)
div2	5 (5, 10)	5 (5, 5)	5 (5, 5)	10 (5, 10)	10 (5, 10)	10 (5, 10)	5 (4, 10)	7.5 (5, 10)
3-cell stage	100 (35, 115)	40 (15, 65)	125 (125, 125)	75 (30, 165)	108 (15, 163)	128 (40, 233)	45 (20, 151)	60 (40, 85)
div3	5 (5, 10)	5 (5, 10)	7.5 (5, 10)	5 (5, 10)	5 (5, 7.5)	5 (5, 7.5)	5 (5, 10)	7.5 (5, 10)
cycle2	1295 (1285, 1305)	1245 (1180, 1315)	1530 (1490, 1570)	1460 (1385, 1655)	1643 (1520, 1710)	1718 (1590, 1908)	1477 (1342, 1587)	1443 (1374, 1554)
4-cell stage	695 (695, 700)	750 (695, 805)	885 (885, 885)	755 (690, 835)	743 (645, 845)	730 (635, 880)	690 (625, 784)	725 (665, 780)
div4	5 (5, 5)	5 (5, 5)	5 (5, 5)	5 (5, 10)	5 (5, 7.5)	5 (5, 10)	10 (5, 10)	5 (5, 10)
5-cell stage	15 (10, 30)	20 (5, 65)	5 (5, 5)	40 (5, 225)	110 (40, 228) ^a	35 (15, 55) ^b	35 (10, 100)	30 (15, 105)
div5	5 (5, 10)	5 (5, 5)	5 (5, 5)	5 (5, 10)	7.5 (5, 10)	5 (5, 10)	10 (6, 10)	5 (5, 10)
6-cell stage	30 (25, 65)	23 (10, 50)	5 (5, 5)	55 (15, 75)	58 (5, 145)	85 (45, 155)	48 (28, 78)	60 (35, 85)
div6	5 (5, 5)	5 (5, 5)	5 (5, 5)	5 (5, 10)	5 (5, 5)	5 (5, 10)	10 (5, 15)	5 (5, 10)
7-cell stage	45 (20, 55)	33 (8, 110)	5 (5, 5)	80 (30, 118)	85 (65, 170)	110 (50, 145)	58 (30, 85)	38 (25, 65)
div7	5 (5, 5)	5 (5, 5)	5 (5, 5)	5 (5, 7.5)	7.5 (5, 10)	5 (5, 5)	10 (5, 10) ^a	5 (5, 5) ^b
cycle3	900 (835, 940)	905 (772.5, 965)	920 (920, 920)	1085 (943, 1133)	1040 (868, 1160)	995 (910, 1160)	880 (830, 955)	880 (855, 950)
8-cell stage	65 (60, 65)	85 (50, 155)	-	30 (10, 50)	115 (115, 115)	75 (50, 175)	55 (30, 115)	65 (25, 80)
compaction	285 (180, 290)	225 (185, 305)	498 (475, 520)	305 (150, 495)	475 (353, 713)	490 (220, 585)	380 (155, 521)	275 (205, 445)
morula stage	1720 (1160, 1800)	1560 (1370, 1850)	1433 (1380, 1485)	1450 (1185, 1695)	1168 (1010, 1328)	1423 (1240, 1508)	1423 (1135, 1630)	1435 (1225, 1655)
cavitation	285 (195, 320)	308 (200, 500)	765 (555, 975)	715 (270, 1160)	393 (250, 475)	265 (227.5, 485)	600 (365, 885)	460 (230, 875)
Frequency	n (%)							
directdiv	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
comp2C	0 (0)	2 (8.7)	0 (0)	4 (21.0)	0 (0)	1 (6.2)	1 (9.1)	2 (9.1)
frag	0 (0)	2 (8.7)	1 (50.0)	8 (42.1)	1 (12.5)	3 (18.8)	7 (63.6)	6 (27.3)

uneven	0 (0)	0 (0)	0 (0)	2 (10.5)	3 (37.5)	4 (25.0)	0 (0)	1 (4.6)
--------	-------	-------	-------	----------	----------	----------	-------	---------

^{a-b} Values with different superscripts differ significantly within the same row in each group ($p < 0.05$). NT: non-treated, PsA: psammaphin A, VitC: vitamin C

|