

Table S1. Analysis of the distribution of the progeny of CARM1-overexpressing blastomere at the blastocyst stage

Embryo	No of Cells	No of Red Cells (% of all cells)	No of Inner (% of all cells)	Inner positive (% of inner)	% of red that are inner	No of Outer (% of all cells)	Outer Positive (% of Outer)	% of red that are outer
Carm1	23	9 (39)	7 (30)	7 (100)	77,78	16 (70)	2 (12.5)	22,22
Carm2	24	10 (42)	9 (38)	9 (100)	90,00	15 (62)	1 (6.6)	10,00
Carm3	21	8 (38)	9 (43)	6 (67)	75,00	12 (57)	2 (16.6)	25,00
Carm4	25	15 (60)	15 (60)	14 (93)	93,33	10 (40)	1 (10)	6,67
Carm5	29	14 (48)	11 (38)	10 (91)	71,43	18 (62)	4 (22)	28,57
Carm6	24	9 (38)	9 (38)	9 (100)	100,00	15 (62)	0 (0)	0,00
Carm7	34	8 (24)	11 (32)	7 (64)	87,50	23 (68)	1 (4.3)	12,50
Carm8	31	13 (42)	11 (35)	9 (82)	69,23	20 (65)	4 (20)	30,77
Carm9	31	14 (45)	10 (32)	10 (100)	71,43	21 (68)	4 (19)	28,57
Carm10	33	12 (36)	9 (27)	8 (89)	66,67	24 (73)	4 (16.6)	33,33
MEAN*	27.5	(41.17)	(37.36)	(88.53)	80.24	(62.64)	(12.76)	19.76
SD*	4.62	(9.32)	(9.11)	(13.73)	11.56	(9.250)	(7.35)	11.56

*Mean and SD in parenthesis correspond to the mean and SD of data expressed as percentage

Blastocysts derived from CARM1 overexpression experiments were fixed and stained with Phalloidin-Texas red to visualise the cell membrane. Confocal z-stacks were taken at 1µm intervals through the whole embryo. Imaris software was used to outline the cell membranes and from those create 3D models of all cells of the embryo. Cells were then scored according to their relative position: those cells completely surrounded by others are denoted as inner cells, those that have an outer surface denoted as outer cells. In conjunction, cells were scored as either positive or negative according to whether they expressed DsRed/CARM1 or not.

Key to table headings:

- No of Cells, is the total cell number in the blastocyst
- No of red cells, is expressed as absolute numbers and also relative (parenthesis) to the total number of cells in the blastocyst
- No of inner cells, is expressed as absolute and relative (parenthesis) to the total number of cells in the blastocyst
- Inner positive cells, expressed as number of positive cells that are inner and relative (parenthesis) to the total number of inner cells
- % of red cells that are inner, is expressed as the relative number of inner cells that are positive for CARM1/DsRed
- No of outer cells, is expressed as absolute and relative (parenthesis) to the total number of cells in the blastocyst
- Outer positive cells, are expressed as absolute number of positive cells that are outer and also relative (parenthesis) to the total number of outer cells
- % of red cells, that are outer is expressed as the relative number of outer cells that are positive for CARM1/DsRed