

**Table S2**

CHGA	neg	pos	neg	neg
NKX6-1	pos	+/-	neg	neg
PDX1	+/-	+/-	pos	neg

Bank	Expt. γ K	Analysis χ	PE	Endocrine	PDX1-only	Residual	Karyotype λ
RCB-D	1	1	33.8	55.7	9.4	1.1	46,XY
		2	37.5	53.7	8.0	0.8	
	2	3	23.0	65.0	10.5	1.5	46,XY
	3	4	29.9	54.2	13.9	2.0	46,XY
	4	5	33.0	52.5	11.6	2.9	NR <sup>α</sup>
		6	35.6	46.7	15.4	2.3	
	5	7	22.0	60.2	16.1	1.7	
	6	8	30.7	42.0	22.0	5.3	46,XY
	7	9	27.6	42.3	25.5	4.6	46,XY
	8	10	22.6	64.5	11.1	1.8	46,XY
		11	25.9	60.9	10.3	2.9	
		12	30.8	59.1	8.0	2.1	
		13	27.9	59.2	10.4	2.5	
	9	14	23.4	61.8	12.4	2.4	46,XY <sup>β</sup>
	10	15	26.8	53.2	18.0	2.0	46,XY
	11	16	33.5	42.0	22.2	2.3	46,XY
	12	17	19.6	59.5	17.0	3.9	46,XY
	13 <sup>c</sup>	18	23.3	62.5	12.2	2.0	46,XY
	14	19	21.5	55.0	20.3	3.2	46,XY

	mean	27.8	55.3	14.4	2.5
	median	27.6	55.7	12.4	2.3
	min	19.6	42.0	8.0	0.8
	max	37.5	65.0	25.5	5.3
n=19					

n=19

<b>MCB3</b>	15	20	33.6	56.6	8.6	1.1	46,XY
		21	30.2	59.5	9.1	1.2	
	16	22	26.3	61.6	10.8	1.3	46,XY
		23	35.0	54.9	8.7	1.4	
	17	24	27.2	60.7	11.0	1.0	46,XY
		25	33.0	54.7	11.2	1.2	

mean	30.9	58.0	9.9	1.2
median	31.6	58.1	10.0	1.2
min	26.3	54.7	8.6	1.0
max	35.0	61.6	11.2	1.4

n=6

<b>MCB4</b>	18 <sup>n</sup>	26	33.6	50.6	15.4	0.3	46,XY
		27	32.1	50.1	16.8	1.0	
	19 <sup>n</sup>	28	29.5	53.2	16.1	1.2	46,XY
		29	29.8	52.0	17.1	1.0	
	20 <sup>n</sup>	30	34.6	50.9	14.0	0.6	46,XY
		31	36.5	46.4	16.2	0.9	
	21 <sup>n</sup>	32	40.7	44.5	14.2	0.6	46,XY

<b>mean</b>	<b>33.9</b>	<b>49.7</b>	<b>15.7</b>	<b>0.8</b>
<b>median</b>	<b>33.6</b>	<b>50.6</b>	<b>16.1</b>	<b>0.9</b>
<b>min</b>	<b>29.5</b>	<b>44.5</b>	<b>14.0</b>	<b>0.3</b>
<b>max</b>	<b>40.7</b>	<b>53.2</b>	<b>17.1</b>	<b>1.2</b>

n=7

<b>MCB5</b>	22	33	35.3	47.7	16.0	1.0	46,XY <sup>¶</sup>
	23	34	33.6	48.7	16.1	1.6	46,XY
	24	35	32.6	50.5	15.9	1.0	46,XY

<b>mean</b>	<b>33.8</b>	<b>49.0</b>	<b>16.0</b>	<b>1.2</b>
<b>median</b>	<b>33.6</b>	<b>48.7</b>	<b>16.0</b>	<b>1.0</b>
<b>min</b>	<b>32.6</b>	<b>47.7</b>	<b>15.9</b>	<b>1.0</b>
<b>max</b>	<b>35.3</b>	<b>50.5</b>	<b>16.1</b>	<b>1.6</b>

n=3

<b>RCB-Dw</b>	25 <sup>¶</sup>	36	35.9	54.4	8.3	1.4	46,XY <sup>¶</sup>
	37	21.3	49.6	27.2	1.9		
	26 <sup>¶</sup>	38	22.2	58.1	17.3	2.4	46,XY
	27 <sup>¶</sup>	39	32.4	51.7	14.7	1.2	46,XY
	28 <sup>¶</sup>	40	41.2	51.3	6.6	1.0	46,XY
	29 <sup>¶</sup>	41	15.6	51.4	31.7	1.3	46,XY
	30 <sup>¶</sup>	42	37.7	42.1	19.4	0.8	46,XY
	31 <sup>¶</sup>	43	47.1	39.9	11.9	1.1	46,XY <sup>¶</sup>
	32	44	26.5	51.9	19.8	1.8	46,XY
	33	45	24.3	54.2	18.6	2.9	46,XY
	34	46	31.4	50.6	16.1	1.9	46,XY

<b>mean</b>	<b>30.5</b>	<b>50.5</b>	<b>17.4</b>	<b>1.6</b>
<b>median</b>	<b>31.4</b>	<b>51.4</b>	<b>17.3</b>	<b>1.4</b>
<b>min</b>	<b>15.6</b>	<b>39.9</b>	<b>6.6</b>	<b>0.8</b>
<b>max</b>	<b>47.1</b>	<b>58.1</b>	<b>31.7</b>	<b>2.9</b>

n=11

<b>WCB4B</b>	35 <sup>¶</sup>	47	36.6	41.6	16.5	5.3	46,XY
	36 <sup>¶</sup>	48	31.3	57.7	9.7	1.3	46,XY
	37 <sup>¶</sup>	49	35.2	48.2	13.5	3.1	46,XY

<b>mean</b>	<b>34.4</b>	<b>49.2</b>	<b>13.2</b>	<b>3.2</b>
<b>median</b>	<b>35.2</b>	<b>48.2</b>	<b>13.5</b>	<b>3.1</b>
<b>min</b>	<b>31.3</b>	<b>41.6</b>	<b>9.7</b>	<b>1.3</b>
<b>max</b>	<b>36.6</b>	<b>57.7</b>	<b>16.5</b>	<b>5.3</b>

n=3

<b>Total</b>	<b>mean</b>	<b>30.4</b>	<b>53.0</b>	<b>14.7</b>	<b>1.9</b>
	<b>median</b>	<b>31.3</b>	<b>53.2</b>	<b>14.7</b>	<b>1.5</b>
	<b>min</b>	<b>15.6</b>	<b>39.9</b>	<b>6.6</b>	<b>0.3</b>
	<b>max</b>	<b>47.1</b>	<b>65.0</b>	<b>31.7</b>	<b>5.3</b>
	<b>SD</b>	<b>6.3</b>	<b>6.4</b>	<b>5.2</b>	<b>1.1</b>
	<b>n=37</b>	<b>n=49</b>			

<sup>¶</sup>Each expt. represents a single thaw and expansion from designated CyT49 bank

<sup>¶</sup>Transplanted to EFP of SCID/Bg mice, unless indicated

<sup>¶</sup>Differentiation run that was not transplanted in this analysis

<sup>¶</sup>Independent cytometry analyses

<sup>¶</sup>Performed at d16

<sup>¶</sup>Processes selected for the 13C group analysis, n=17 analyses

<sup>¶</sup>20 nuclei examined per analyses. Performed after culture expansion for scaled differentiation

<sup>¶</sup>NR: no result, technical failure of analysis

<sup>¶</sup>30 nuclei examined

<sup>¶</sup>Analysis performed 7 passages after thaw