

Supplemental Table 1- Characterization of iPax7 iPS clones.

<i>TTF</i> Clone #	<i>SSEA-1</i>	<i>AP</i> staining	<i>Nanog</i> staining	<i>Morphology</i>	<i>EB</i> formation	<i>Paraxial</i> <i>mesoderm/myogenic</i> <i>differentiation</i>	<i>Teratoma</i> formation	<i>In vivo</i> <i>regen.</i>	<i>Karyotype</i> <i>report</i>
1	97.2	Typical	Typical	Typical	Typical	Efficient	yes	+/-	10 of 12 normal ^(a)
2	96.9	Typical	Typical	Typical	Typical	Efficient	yes	yes	20 of 20 normal
3	97.6	Typical	Typical	Typical	small	Limited	ND	ND	ND
4	87.1	Typical	Typical	Typical	Typical	Limited	ND	ND	ND
6	97	Typical	Typical	Typical	small	Limited	ND	ND	ND
9	94.1	Typical	Typical	Typical	Typical	Limited	ND	ND	ND
10	97.2	weak	weak	Typical	Typical	Limited	ND	ND	ND
11	93.6	Typical	weak	ND	ND	ND	ND	ND	ND
15	79.9	Weak	Typical	ND	ND	ND	ND	ND	ND
24	86.9	Typical	weak	ND	ND	ND	ND	ND	ND

<i>ICE</i> Clone #	<i>SSEA-1</i>	<i>AP</i> staining	<i>Nanog</i> staining	<i>Morphology</i>	<i>EB</i> formation	<i>Paraxial</i> <i>mesoderm/myogenic</i> <i>differentiation</i>	<i>Teratoma</i> formation	<i>In vivo</i> <i>regen.</i>	<i>Karyotype</i> <i>report</i>
1	90.2	weak	Typical	Typical	small	Limited	ND	ND	ND
3	88.7	Typical	Typical	Typical	Typical	Efficient	yes	+/-	1 of 10 normal ^(b)
4	93.9	Typical	Typical	Typical	Typical	Limited	ND	ND	ND
7	94.4	Typical	Typical	Typical	Typical	Efficient	yes	Yes	20 of 20 normal
8	95.3	weak	Typical	Typical	Typical	Limited	ND	ND	ND
9	96	Typical	weak	Typical	Typical	Limited	ND	ND	ND
12	95.2	Typical	Typical	Typical	small	Limited	ND	ND	ND
15	98.2	Typical	Typical	Typical	Typical	Efficient	yes	+/-	8 of 15 normal ^(c)
16	98	weak	weak	Typical	Typical	Limited	ND	ND	ND

* Annotation in red describes the iPS clones that were selected for the *in vivo* transplantation studies. These clones were also assayed for teratoma formation and karyotype analysis.

ND: not determined

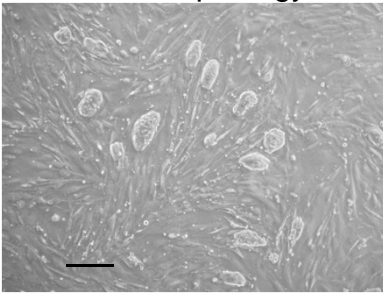
+/-: Weak engraftment/dystrophin restoration without functional recovery

Karyotype abnormalities:

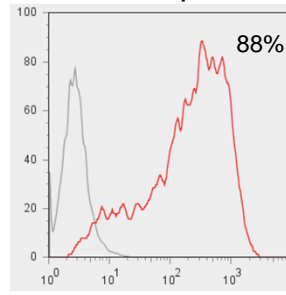
- (a) 2 of 12 had 41 chromosomes including Trisomy for chromosome 6
- (b) 2 of 10 had an abnormal Y, resulting two copies of Y for the cells, and 7 of 10 had 39 chromosomes with loss of the Y
- (c) 1 of 11 had 39 chromosomes with loss of the Y, and 2 of 11 had 37 chromosomes with chromosomes losses and marker chromosome of unknown origin

A

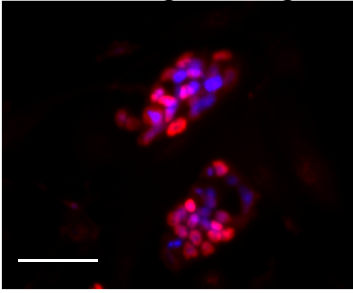
iPS morphology

**B**

SSEA-1 expression

**C**

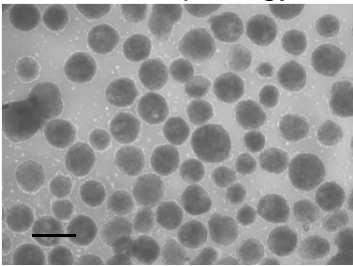
Nanog staining

**D**

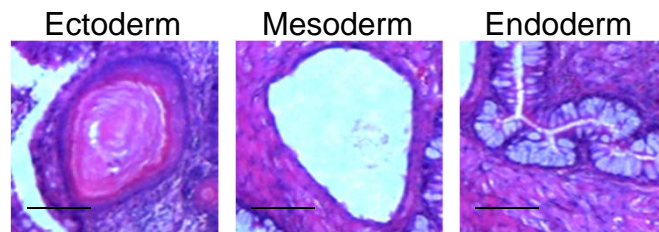
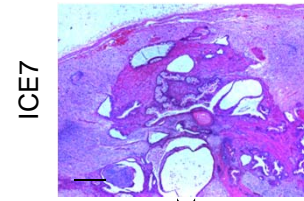
AP staining

**E**

EB morphology

**F**

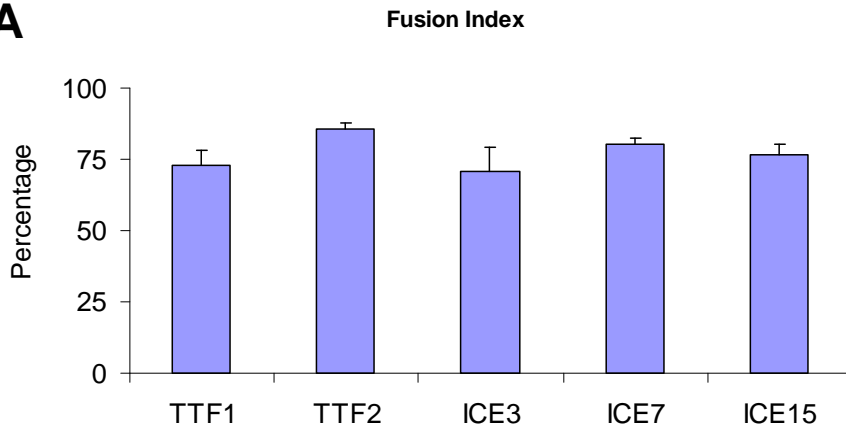
Teratoma formation



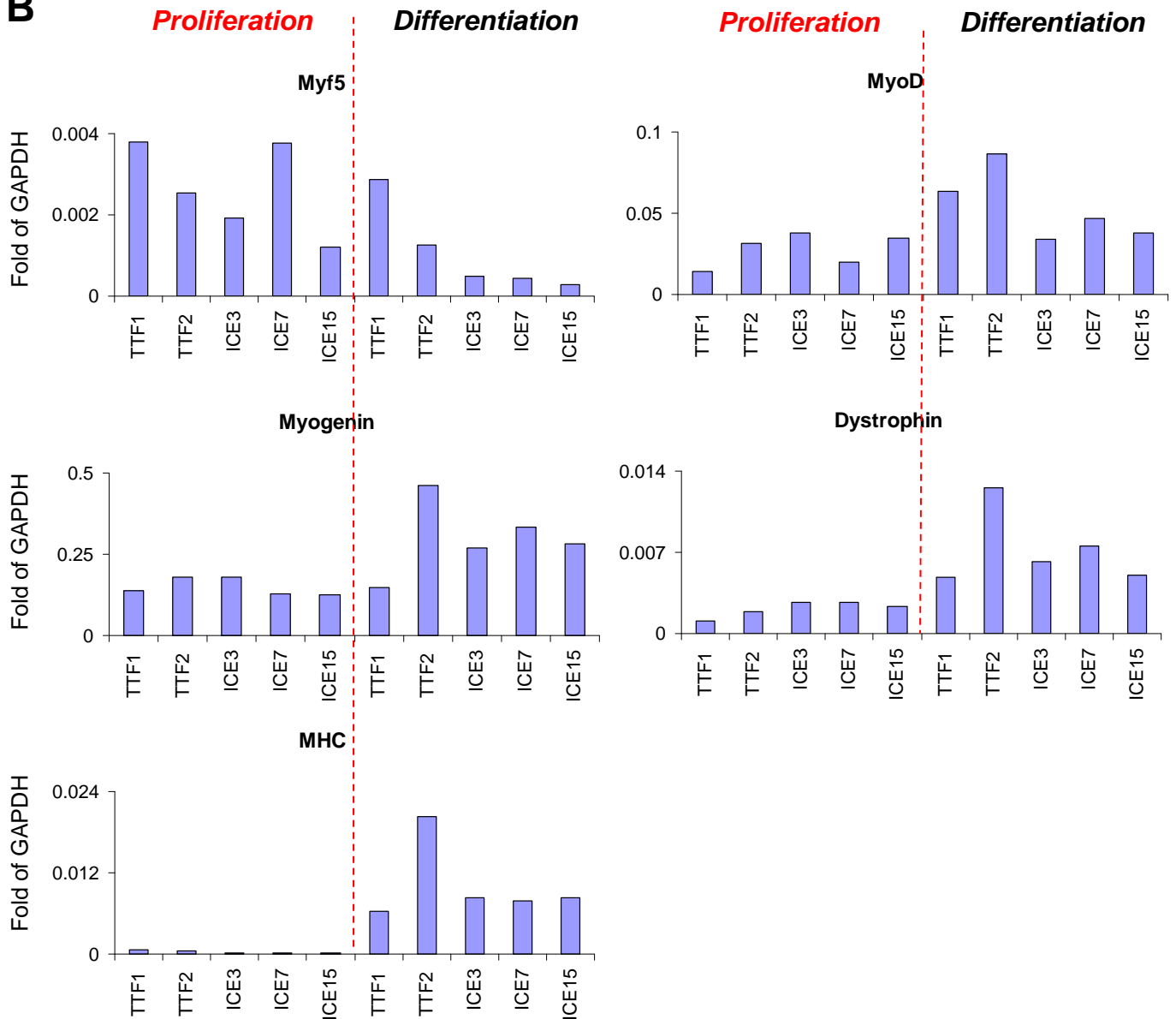
Ectoderm: Keratin pearl
 Mesoderm: Cartilage
 Endoderm: Gut epithelium

Supplemental Figure 2

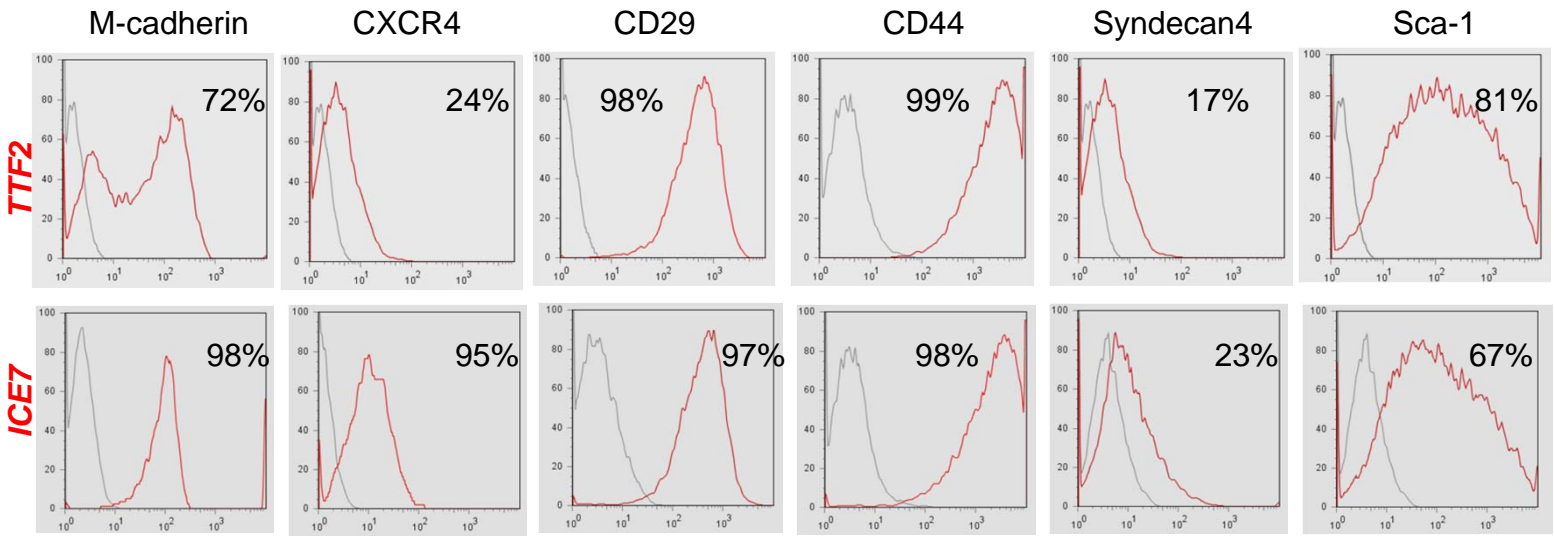
A



B



Supplementary Figure 3



Supplemental Figure 4

