

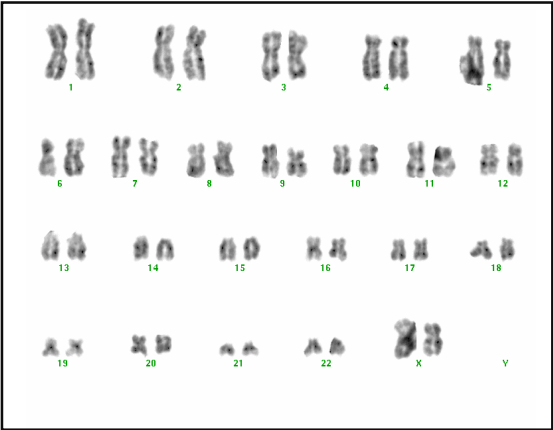
## Supplementary TABLE 1

X-chromosome signals in the nucleus of fibroblasts isolated from a DMD-manifesting carrier (609) and in four hiPS clones

| X-Chromosome signals/nucleus                       | 0            | 1           | 2              | 3           | 4           |
|--|--------------|-------------|----------------|-------------|-------------|
| 609 fibroblasts<br>n=168                           | 0            | 3<br>(1.8%) | 155<br>(92.3%) | 3<br>(1.8%) | 7<br>(4.2%) |
| 609-2 iPS (p5)<br>(retroviral vector)<br>n=151     | 0            | 2<br>(1.3%) | 143<br>(94.7%) | 2<br>(1.3%) | 4<br>(2.6%) |
| 609-4 iPS (p6)<br>(retroviral vector)<br>n=75      | 0            | 3<br>(4.0%) | 69<br>(92.0%)  | 0           | 3<br>(4.0%) |
| 609S-1 iPS (p10)<br>(Sendai viral vector)<br>n=150 | 1<br>(0.67%) | 6<br>(4.0%) | 137<br>(91.3%) | 6<br>(4.0%) | 0           |
| 609S-2 iPS (p8)<br>(Sendai viral vector)<br>n=142  | 0            | 4<br>(2.8%) | 132<br>(93.0%) | 4<br>(2.8%) | 2<br>(1.4%) |

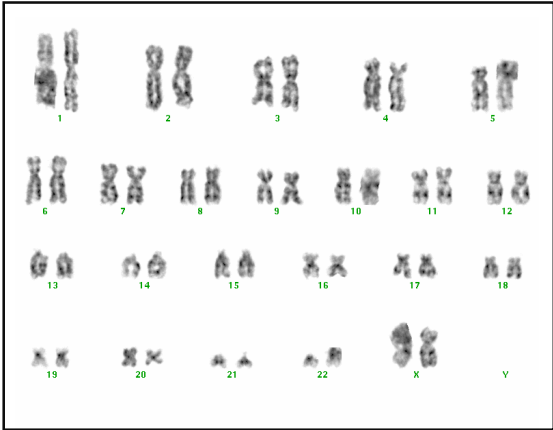
# Supplementary Figure 1

609 Fibroblast (parental)



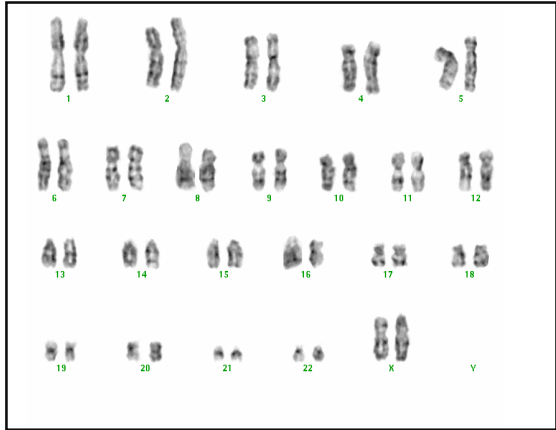
46, XX

609-4 (Retro-hiPSC, p6)



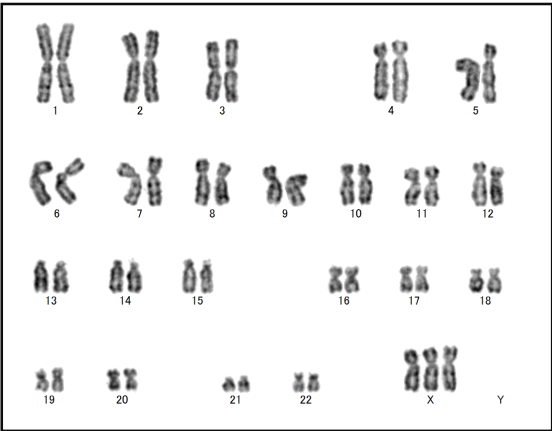
46, XX

609S-3 (Sendai-hiPSC, p5)



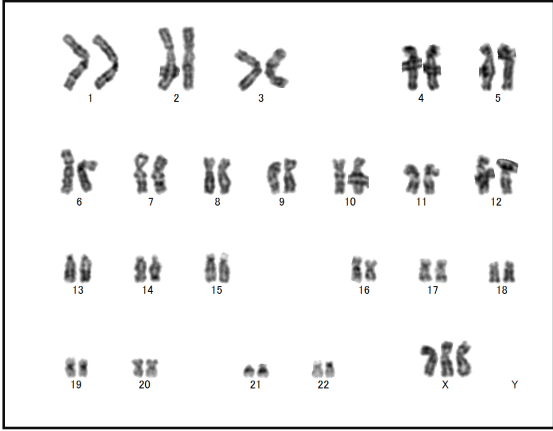
46, XX

386 Fibroblast (parental)



47, XXX

386S-11 (Sendai-hiPSC, p6)

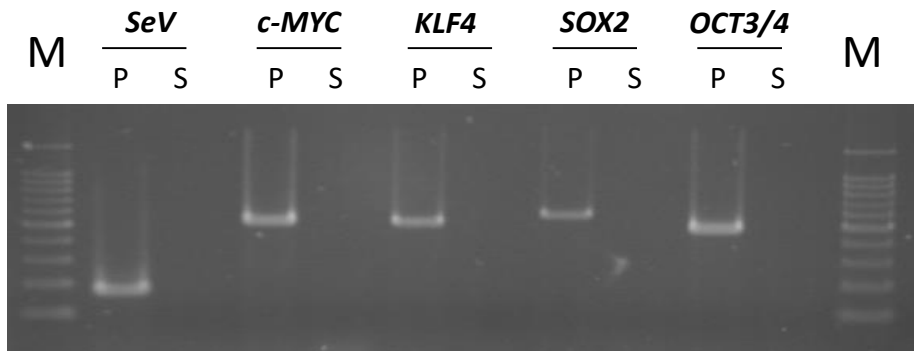


47, XXX

## Supplementary Figure 2

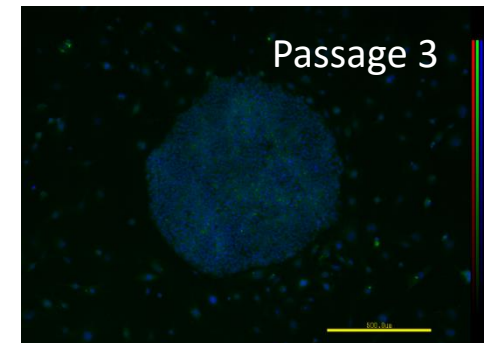
**A**

Sendai viral vector-iPSCs (609S-1)



**B**

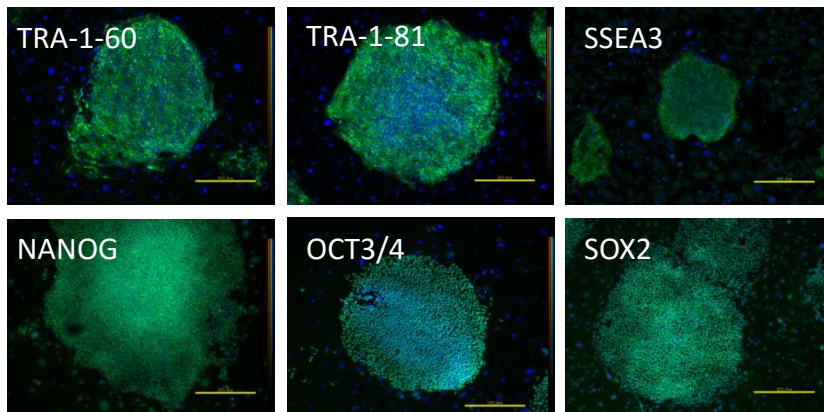
Sendai viral vector-iPSCs (609S-1)



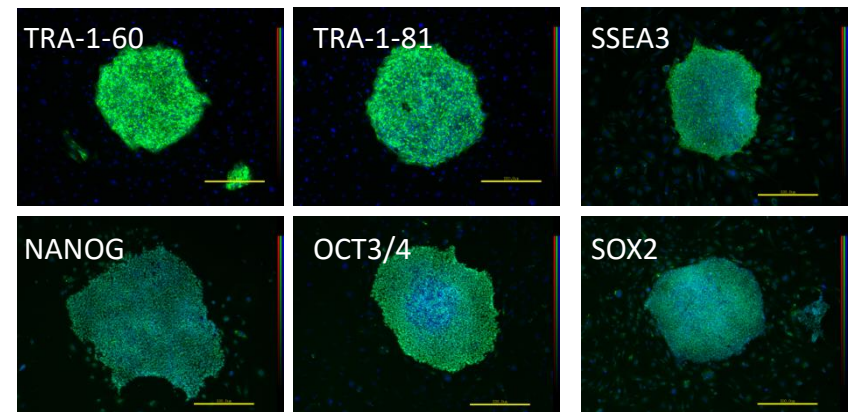
Bar: 500  $\mu$ m

**C**

Retroviral vector- iPSCs (609-2)



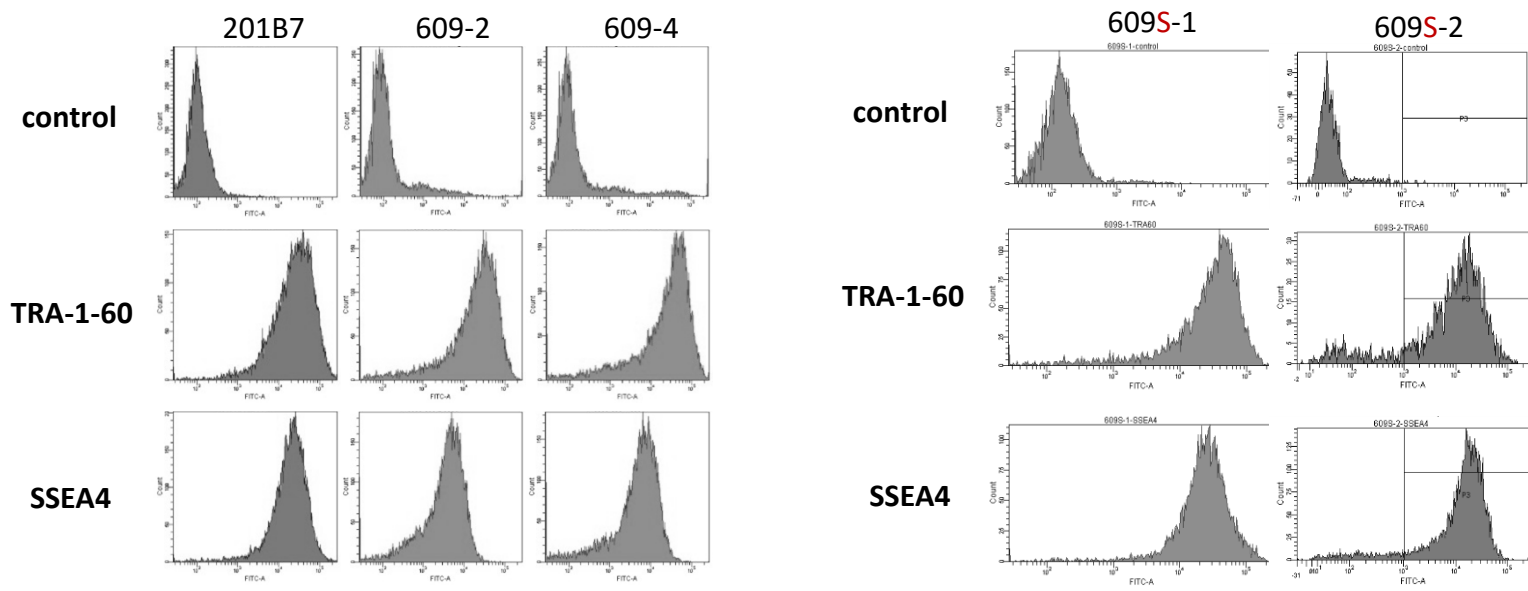
Sendai viral vector-iPSCs (609S-1)



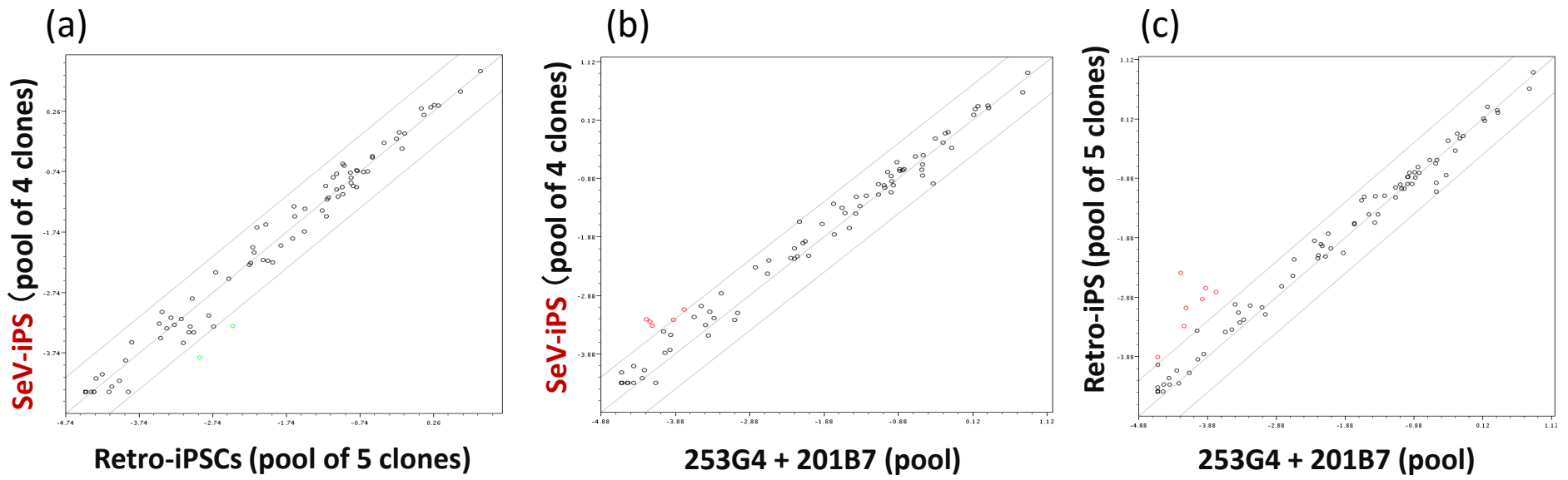
Scale bar=200  $\mu$ m

# Supplementary Figure 3

A



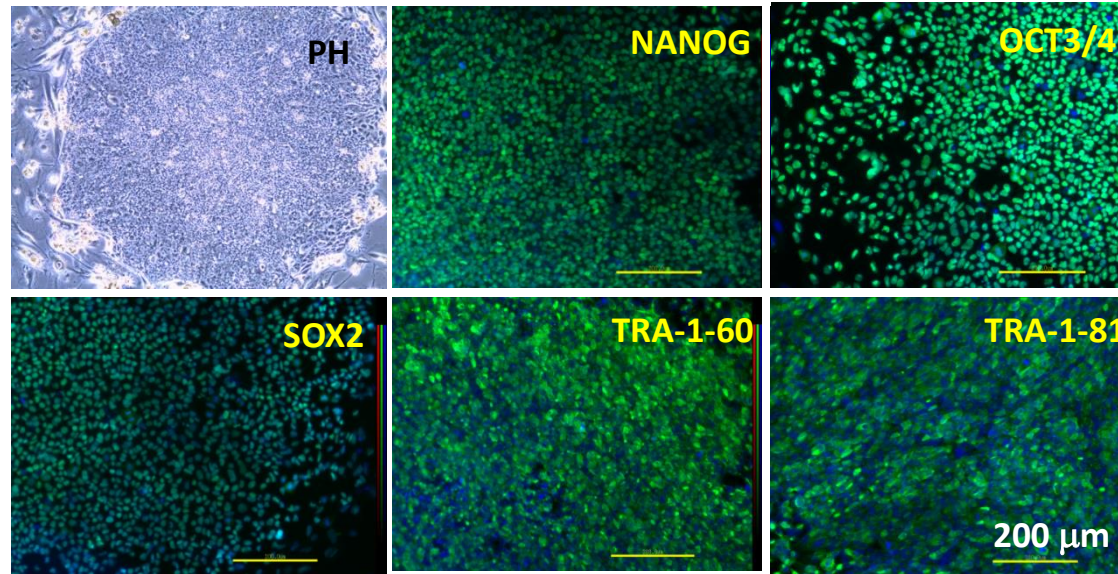
B



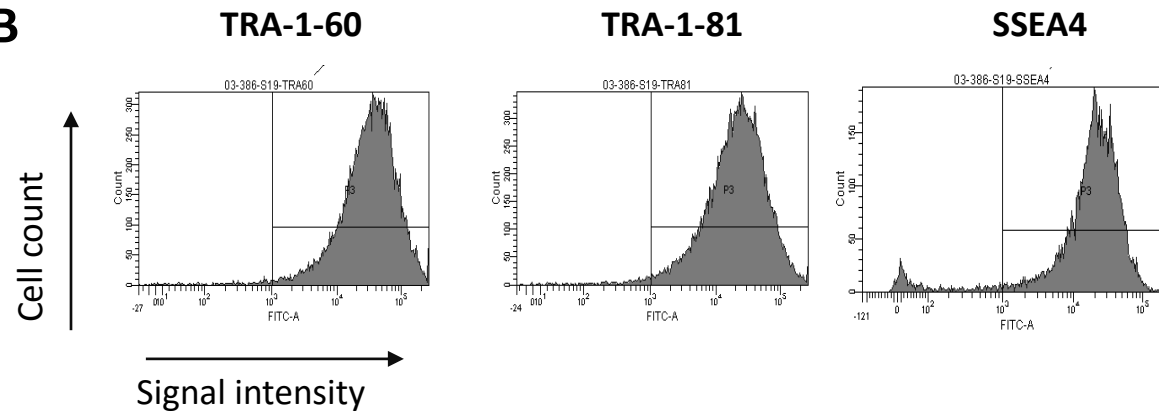
## Supplementary Figure 4

**A**

**386S-19 iPSCs**



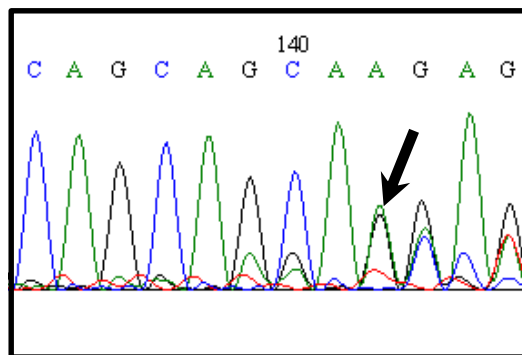
**B**



## Supplementary Figure 5

**Equally expressed**

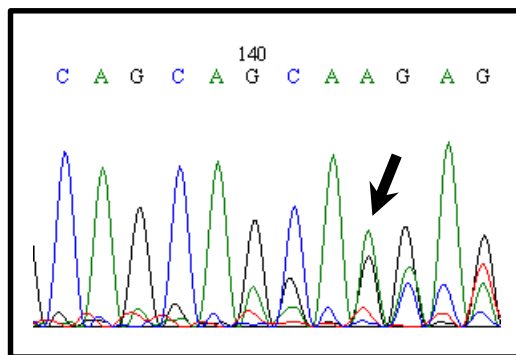
609-9 iPSCs



*Retro-iPSCs*

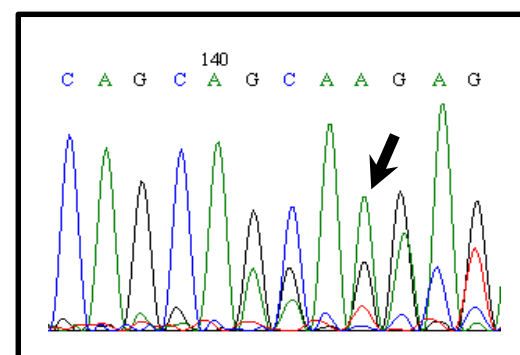
**Unequally expressed**

609 Fibroblast

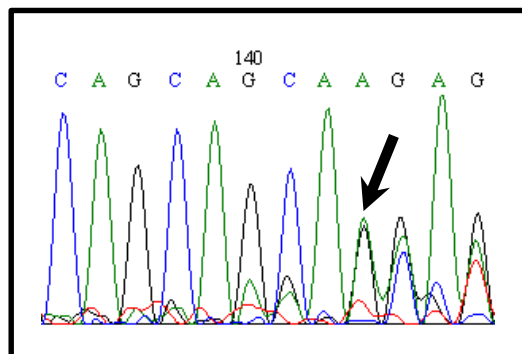


**Male pattern**

670 fibroblasts

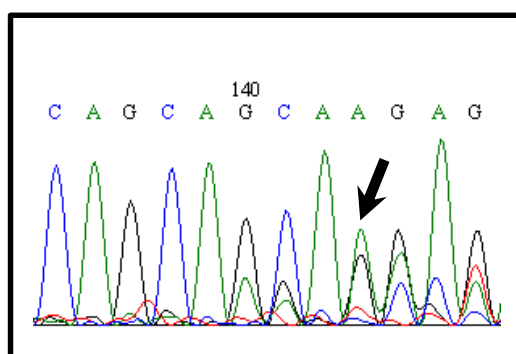


609S-3 iPSCs



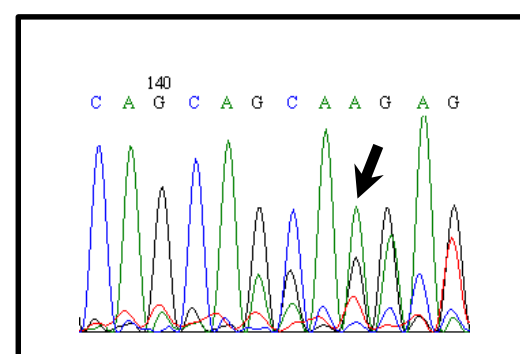
*Sendai-iPSCs*

609-4 iPSCs

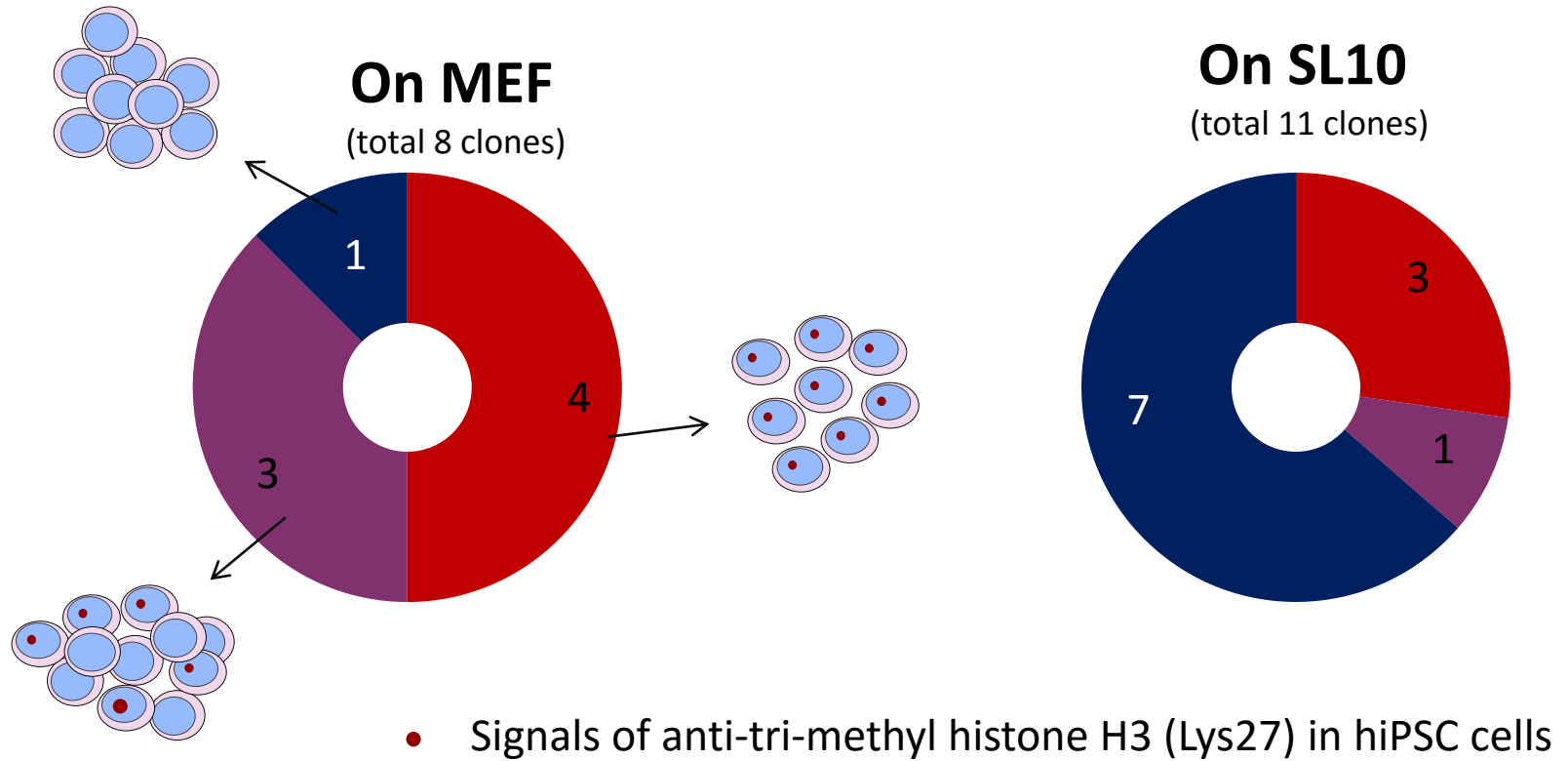


*Retro-iPSCs*

401 fibroblasts (DMD)



## Supplementary Figure 6



Supplementary Figure 7

Reprogramming

Differentiation

skewed XCI is...

