

# Characterization of hPSC

<b>Cell Line Name</b>	<b>SNUhES3</b>			
<b>Type of Cell Line</b>	<b>hESC</b>			
<b>Depositor (Institution)</b>	<b>Seoul National University</b>			
<b>Passage #</b>	<b>p27*</b>			
<b>Day of Cell Freezing</b>	<b>20120927*</b>			
<b>Analysis</b>	<b>Result</b>	<b>Passage#</b>	<b>Day of analysis</b>	
Cell viability	Pass (67.0±0.8%)	p27	20170707	
Authentication (STR)	Pass	p28	20170627	
Mycoplasma test (PCR)	Pass	p28	20170616	
Cell attachment & Colony morphology	Pass	p29	20170627	
Microbial contamination test (Virus, Fungi, bacteria)	Pass	p28	20170719	
Karyotype (G-banding)	정상(46,XY)	p28	20170719	
HLA genotype	HLA-A *01:01G *24:02G HLA-B *51:01G *52:01G HLA-DRB1 *15:01G *15:02G	p28	20170717	
ABO genotype	OO	p28	20170627	
CNV analysis (CNV_Chip)	Xq22.33(gain)	p29	20171108	
Stem Cell Marker Expression				
· qRT-PCR	Pass (Positive)	p29	20171108	

\* Freezing media : 95% Serum with 5% DMSO

\* The cryopreserved stock of this cell was provided by depositor (SNU).

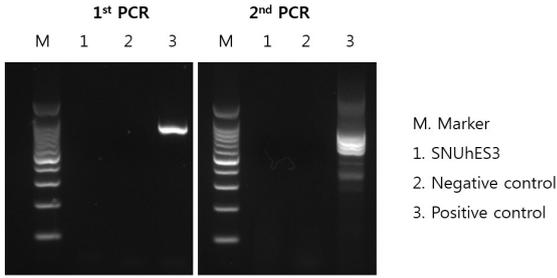
## Cell Culture Condition

- Feeder STO (mouse embryonic fibroblast; ATCC CRC-1503)
- Media hPS media (DMEM/F12 supplemented KSR and FGF2)
- Passage (Cell dissociation) Manual detachment/Dispase II (Gibco, #17105-041)

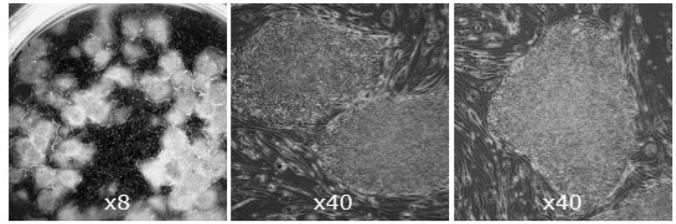
Reference :

Oh SK et al. Derivation and characterization of new human embryonic stem cell lines: SNUhES1, SNUhES2, SNUhES3. Stem Cells 2005 Feb;23(2):211-9.

### Mycoplasma contamination test



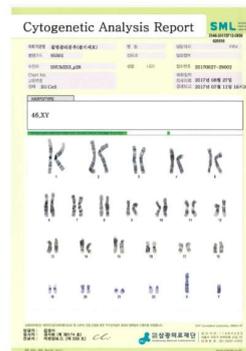
### Cell attachment & Morphology



Thawing after Day 10

### Microbial contamination test

### Karyotype



### CNV analysis

Chromosome	Copy Number	Result
1	2	Normal
2	2	Normal
3	2	Normal
4	2	Normal
5	2	Normal
6	2	Normal
7	2	Normal
8	2	Normal
9	2	Normal
10	2	Normal
11	2	Normal
12	2	Normal
13	2	Normal
14	2	Normal
15	2	Normal
16	2	Normal
17	2	Normal
18	2	Normal
19	2	Normal
20	2	Normal
21	2	Normal
22	2	Normal
X	1	Normal
Y	1	Normal

### Stem cell marker gene expression

<qRT-PCR>

GENE	CTmean
NANOG	26.43
OCT4	29.91
SOX2	29.12
TERT	30.90
TDGF1	25.11
DNMT3B	24.92
GABRB3	26.84
GDF3	30.47
REX1	28.22
GAPDH	23.93
ACTB	22.74

