

## Characterization of hPSC

<b>Cell Line Name</b>	<b>CMC-hiPSC-022</b>			
<b>Type of Cell Line</b>	<b>hiPSC</b>			
<b>Depositor (Institution)</b>	<b>Catholic University of Korea</b>			
<b>Passage #</b>	<b>p18*</b>			
<b>Day of Cell Freezing</b>	<b>20190903*</b>			
<b>Analysis</b>	<b>Result</b>	<b>Passage#</b>	<b>Day of analysis</b>	
Cell viability	79.9±1.37%	p20	20191001	
Authentication (STR)	Pass	p21	20191017	
Mycoplasma test (PCR)	Pass	p21	20191015	
Cell attachment and colony morphology	Pass	p21	20190821	
Microbial contamination test (Virus, Fungi, bacteria)	Pass	p21	20191031	
Karyotype (G-banding)	46,XX	p21	20191024	
HLA genotype	HLA-A *33:03 HLA-B *44:03 HLA-DRB1 *13:02	p12	20180612	
ABO genotype	BB	p17	20190726	
CNV analysis (CNV_StemCellTechnol)	Not detected	p19	20191127	
<b>Stem Cell Marker Expression</b>				
· AP staining	Pass	p15	20190711	
· ICC	Pass	p15	20190923	
· qRT-PCR	Pass	p15	20191021	
<b>Differentiation Marker Expression</b>				
· EB formation	Pass (EB14d)	p15	20190910	
· qRT-PCR	Pass	p15	20191021	
· Teratoma formation	Pass	p12	20191231	

\* Freezing media : Stem Cell Banker (Amsbio, 11897)

### Cell Culture Condition

- Feeder/matrix                      · Vitronectin (Gibco, A14700)
- Media                                 · TeSR-E8 Basal Medium(Stem Cell Technol, #05990)
- Passage (Cell dissociation)      · EDTA/Gentle Cell Dissociation Reagent (Stem cell Technol, 07174)

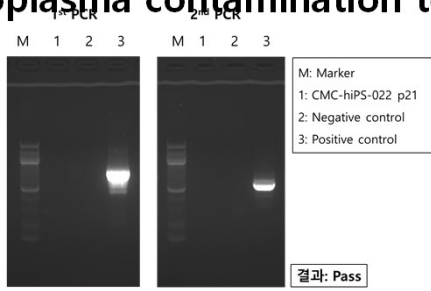
### Description of the hPSC

Parental Cell                              Cord Blood Cell

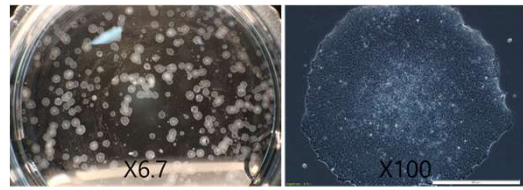
Reprogram                                Sendai virus (CytoTune-iPS Reprogramming kit, Invitrogen)

OCT3/4, SOX2, KLF4, c-MYC

### Mycoplasma contamination test



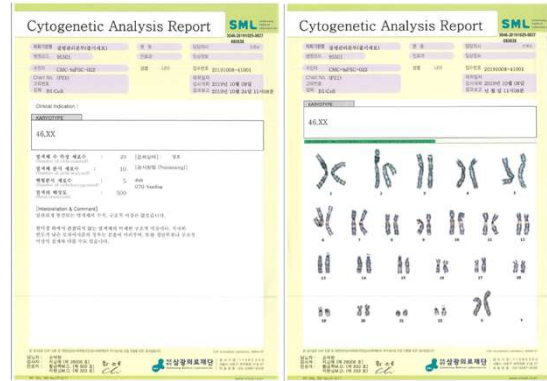
### Cell Morphology



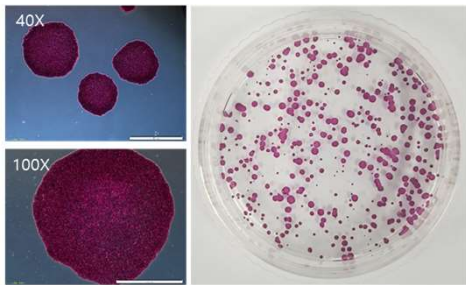
### Microbial contamination test

항목	결과	비고
0800001	양성	CMC-hiPSC-022
0800002	음성	PCB
0800003	양성	CMC-hiPSC-022
0800004	음성	PCB

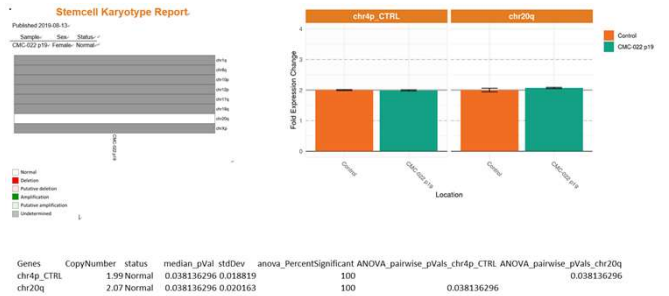
### Karyotype



### AP staining

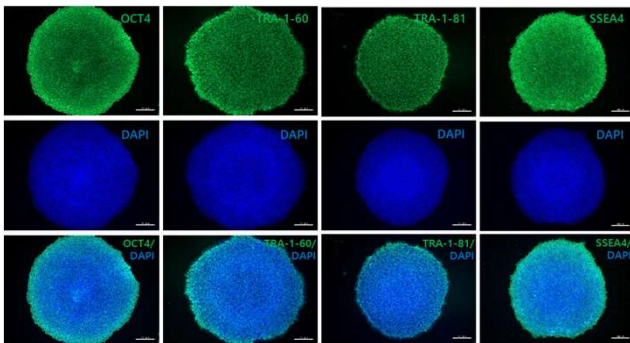


### CNV analysis



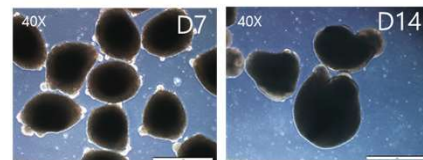
### Stem cell marker gene expression

<ICC>



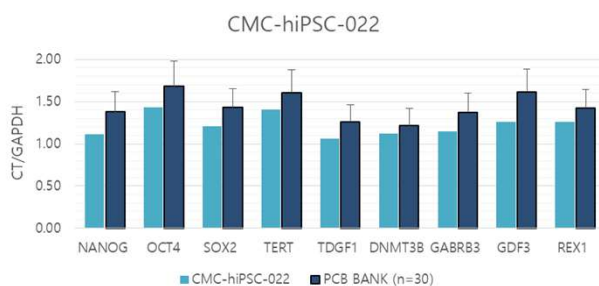
### Differentiation marker gene expression

<EB formation>



<qRT-PCR, EB 14d>

<qRT-PCR>



Gene	Ct mean
PAX6	23.17
SOX1	27.84
HNF3B	24.79
AFP	25.11
T	27.74
MYOG	33.38
ACTB	14.18
GAPDH	15.00

