

# Characterization of hPSC

<b>Cell Line Name</b>	<b>PB01-EiPS21</b>			
<b>Type of Cell Line</b>	<b>hiPSC</b>			
<b>Depositor (Institution)</b>	<b>Korea National Institute of Health</b>			
<b>Passage #</b>	<b>p28*</b>			
<b>Day of Cell Freezing</b>	<b>20210209*</b>			
Analysis	Result	Passage #	Day of analysis	
Cell viability	Pass (85.3±6.0 %)	p29	20210201	
Authentication (STR)	Pass	p30	20210223	
Mycoplasma test (PCR)	Pass	p29	20210219	
Microbial contamination test (Virus, Fungi, bacteria)	Pass	p31	20210520	
Karyotype (G-banding)	46,XY	p25	20210223	
Cell attachment and colony morphology	Pass	p28	20210209	
Attached cell number	Day4, 1.74 x10 <sup>5</sup> cells/ml Day7, 16.95 x10 <sup>5</sup> cells/ml	p28	20210222	
CNV analysis (CMA)	Not-detected (arr(X,Y)x1,(1-2)x2)	p32	20210709	
<b>Stem Cell Marker Expression</b>				
· AP staining	Pass	p27	20210204	
· ICC	Pass	p30	20210308	
· qRT-PCR	Pass	p26	20210216	
<b>Differentiation Marker Expression</b>				
· EB formation	Pass (EB14d)	p29	20210422	
· qRT-PCR	Pass	p29	20210426	
· Teratoma formation	Pass (three-germ layer tissue detected)	p12	20191231	
HLA genotype	HLA-A *24:02:01G *33:03:01G HLA-B *44:03:01G *01:01:01G HLA-DRB1 *09:01:02G *13:02:01G	p17	20190801	
ABO genotype	BB	p17	20190726	

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

## Cell Culture Condition

- Feeder/matrix Vitronectin (Gibco, A14700)
- Media TeSR-E8 (Stem Cell Technol, ST05940))
- Passage (Cell dissociation) EDTA

## Description of the hPSC

- Parental Cell
  - Peripheral blood cells (PB01)
- Reprogram
  - Episomal Vector (SOP#202.1)
  - Epi5 Episomal iPSC Reprogramming Kit (Thermo Fisher, A15960)
  - Oct4, Sox2, Klf4, c-Myc, Lin28, p53DD

## Reference

Im YS et al. Generation of integration-free induced pluripotent stem cell line (KSCBi017-A) from peripheral blood mononuclear cells of a healthy male individual. Stem Cell Res. 2022 Dec;65:102965

