

## 줄기세포주 특성분석 결과보고서

<b>Cell Line Name</b>	<b>hiPSC-TLR7KO-A59</b>		
Alternative name	CMC-hiPSC-003(TLR7KO-A59)		
<b>Type of Cell Line</b>	<b>hiPSC</b>		
<b>Depositor (Institution)</b>	<b>Korea National Institute of Health</b>		
<b>Passage #</b>	<b>p39*</b>		
<b>Day of Cell Freezing</b>	<b>20200330*</b>		
<b>분석내용</b>	<b>결과</b>	<b>계대수</b>	<b>분석일자</b>
Cell viability	Pass(77.8±1.3%)	p39	20200916
Authentication (STR)	Pass	p39	20200908
Mycoplasma test (PCR)	Pass	p39	20200922
Cell attachment and colony morphology	Pass	p39	20211001
Bacterial, and fungal contamination test	Pass	p39	20200908
Viral contamination test	Pass	p39	20200904
Karyotype (G-banding)	46,XY	p39	20200915
Stem Cell Marker Expression			
· AP staining	Pass (positive)	p32	20181109
· ICC	Pass (positive)	p33	20200719
· qRT-PCR	Pass (positive)	p32	20181205
Differentiation Marker Expression			
· EB fomation	Pass (EB14d)	p37	20181109
· qRT-PCR	Pass (positive)	p32	20181205
· Hematopoietic/ macrophage lineage	Pass (positive)	p37	20190528

\* Freezing media : Stem-cellbanker (Zenoaq #BLC-3-1)

### Cell Culture Condition

- Feeder(matrix) :                 - Vitronectin (Gibco, A14700)
- Media :                             - Essential 8 (Gibco, ThermoFisher, A1517001)
- Clone R (Stem Cell Technol., CAT#05888) or Y27632, at thawing
- Passage (Cell                     - EDTA or Gentle Cell Dissociation Reagent (Stem cell Technol, 07174)
- dissociation)                       - EZPassage (Thermo-Fisher 23181010)

### Genetic Modification

- Parental Cell                     - CMC-hiPSC-003 (Catholic University of Korea)
- Genetic modification           - CRISPR/Cas9, TLR7 knock-out

### Reference

Han HJ, Generation of a TLR7 homozygous knockout human induced pluripotent stem cell line using CRISPR/Cas9. Stem Cell Res 2019 Oct;40:101520.

