

Copy number variation (CNV) analysis				Document No.	2018-10
				Issue date	2018-10-15
Stem cell Information					
Stem cell line	CMC-hiPSC-003(Pdx1-GFP)			Institute	KSCR
Cell type	hiPSC			Inspection date	2018-08-09
Banking status	Internal Deposited Cell Line Banking			Issue date	2018-10-15
Passage	p13				
Note					
Experiment type					
SNP chip					
Platform	Affymetrix CytoscanHD		Analysis program	ChAS 3.1	
Reference	hg19		Analysis document	SOP#26-Ver.4	
Statistics					
		Total	Gain	Loss	
the number of total CNVs		13			
the number of manually filtered CNVs		2	0	2	
the number of CNVs excluded Korean normal CNV DB (KGVDB)		2	0	2	
Result of Data Analysis					
List of CNVs					
	Total	Gain	Loss	Cytoband	
The number of total CNV calls	2	0	2		
The number of Pathogenic CNVs	2	0	2	8q24.22, 12q24.31	
The number of Recurrent CNVs	.	.	.		
The number of stemness-related CNVs	.	.	.		
The number of Differentiation-related CNVs	.	.	.		
The number of cancer-related CNVs	1	0	1	8q24.22	
The number of immunogenicity-related CNVs	.	.	.		
*Recurrent CNVs include CNV gain on 1q41, 12p13.31, 17q25.2 and 20q11.21, CNV loss on 10p11.22					
Interpretation					

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chr	Cytoband	chr_start	chr_end	length (kbp)	Copy Number	CNV	Genes	OMIM Gene counts	OMIM genes (Phenotype)	Recurrent CNV	Cancer-related	Stemness-related	Differentiation-related	immunogenicity-related	KGVDB
8	q24.22	133,906,663	140,636,443	6729.8	1.718169	LossMosaic	TG, SLA, MIR7848, WISP1, NDRG1, ST3GAL1, LOC105375773, LOC101927798, LOC101927822, ZFAT, ZFAT-AS1, MIR30B, MIR30D, NCRNA00250, LOC101927845, LINC01591, KHDRBS3, LOC101927915, FAM135B, COL22A1, KCNK9	9	TG (188450), SLA (601099), WISP1 (603398), NDRG1 (605262), ST3GAL1 (607187), ZFAT (610931), KHDRBS3 (610421), COL22A1 (610026), KCNK9 (605874)		NDRG1				No

12	q24.31	125,599,574	131,579,206	5979.6	1.731871	LossMo sai	AACS, TMEM132B, LINC00939, LOC10192746 4, LOC10012855 4, LOC10099667 1, LINC00944, LINC00943, LOC440117, LOC10192759 2, LOC10192761 6, LOC10192763 7, LOC10537006 8, RJ37505, LINC00508, LINC00507, CRAT8, LOC10099667 9, LOC10192769 4, MIR4419B, TMEM132C, MIR3612, SLC15A4, GLT1D1, TMEM132D, LOC283352, LOC10192773 5, LOC10019094 0, FZD10-AS1, FZD10, PIWIL1, RIMBP2, STX2	9	AACS (614364), SLC15A4 (615806), TMEM132D (611257), FZD10 (606147), PIWIL1 (605571), RIMBP2 (611602), STX2 (132350), RAN (601179), ADGRD1 (613639)					No
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