

Biosafety Documentation: *iCell*[®] Cardiomyocytes²

Donor ID	11713		
Cell Line ID	11713.847	Phenotype	Apparently Healthy Normal
Catalog #	C1233	Donor Sex	Female
Starting Material	Blood	Race	Caucasian
Age at Collection	30 - 39 years	Ethnicity	Unknown

Cell Source and Biosafety Level Classification

iCell[®] products are human cells differentiated from a master bank of stably induced pluripotent stem (iPS) cells. FUJIFILM Cellular Dynamics, Inc. (FCDI), classifies these cells as Biosafety Level 1 (BSL1) based on the United States Centers for Disease Control and Prevention publication: *Biosafety in Microbiological and Biomedical Laboratories*. Handle the cells according to the biosafety guidelines applicable in your region.

Reprogramming

The iPS cell lines were generated from human peripheral blood through ectopic expression of reprogramming factors (e.g. OCT4, SOX2, NANOG, LIN28, KLF4, L-MYC, SV40LT) by episomal transfection.

Following reprogramming, no episomal plasmids were detected by PCR in the iPS cell line.

Engineering

The iPS cells were engineered using nuclease-mediated methodologies to exhibit blasticidin resistance under the control of a cardiomyocyte-specific promoter. Puromycin resistance was also included in the targeting vectors to allow selection of the iPS cell clones.

None of the engineering vectors used contain oncogenes.

Infectious Disease Testing

The incoming blood was tested and non-reactive for HBV, HCV, HIV-1, and HIV-2.