

Biosafety Documentation: *KCNT1 iCell® Products*

Donor ID	01434	Genotype	KCNT1 P924L
Cell Line ID	01434.747	Zygoty	Heterozygous
Donor Sex	Female	OMIM Disease	614959
Starting Material	Fibroblast	OMIM Gene	608167
Age at Collection	< 18 years	Catalog #	C1173
Race	Caucasian		
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 line was generated from human fibroblasts through ectopic expression of reprogramming factors by retroviral transfection. The retroviral particles used in this process were obtained from cell culture supernatant of HEK 293T cells transfected with plasmids containing the reprogramming factor genes as well as the coding regions of the gag, pol and env retroviral genes.

No retroviral gene expression was detected by PCR in the starting fibroblast material or the iPS cell line, confirming that the cell line cannot spontaneously produce infectious virus.

Engineering

The iPS cell line was engineered to introduce the KCNT1 P924L mutation.

None of the engineering vectors used contain oncogenes.

Infectious Disease Testing

The cell line was tested and non-reactive for HBV, HCV, HIV-1, and HIV-2.

In addition, the cell line was tested and non-reactive for HTLV1, HTLV2, HAV, Hantavirus, HSV1, HSV2, HCMV, HHV6, HHV8, HAdV, HPV16, HPV18, LCMV, VZV, EBV and syphilis.