

Biosafety Documentation: *iCell[®] Microglia*

Catalog Number(s): C1134
Donor ID Number: 01279.1185
Genotype: *TREM2* (Heterozygous)

Cell Source and Biosafety Level Classification

iCell[®] Microglia 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 (i.e. *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 cell line was engineered with a single base pair duplication in exon 2 of the triggering receptor expressed on myeloid cells 2 (*TREM2*) gene leading to a frameshift and a premature stop codon.

None of the engineering vectors used contain oncogenes.

Infectious Disease Testing

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