

Biosafety Documentation: *iCell® GlutaNeurons*

Catalog Number(s): GNC-301-030-000.5, GNC-301-030-001

Cell Source and Biosafety Level Classification

iCell® GlutaNeurons are human cells differentiated from a master bank of stably induced pluripotent stem (iPS) cells. Cellular Dynamics International, Inc. (CDI) 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*. We recommend handling iCell GlutaNeurons 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 clones were engineered using nuclease-mediated methodologies to exhibit neomycin resistance under the control of a neuronal-specific promoter. Puromycin resistance was also included in the targeting vector to allow selection of the iPS cell clones. None of the engineering vectors used contain oncogenes.

Infectious Disease Testing

The iPS cell line is negative for HBV, HCV, HIV-1, HIV-2, HTLV-1, and HTLV-2.

Reference(s)

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