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## **Product Information Sheet – Validated iPS Lines**

**Description:** Each vial of cells contains approximately  $1 \times 10^6$  iPS cells, stored frozen in 1mL cryopreservation solution (80% DMEM, 10% FBS, 10% DMSO). The iPS cells were generated from C57BL/6x129 MEFs infected with lentiviral vectors encoding doxycycline inducible reprogramming factors Oct 4, Sox 2, Klf 4, and c-Myc. The MEFs were also infected with a virus encoding the reverse tetracycline transactivator RTTA. iPS line 1-A4 has been validated for pluripotency. These cells are positive for alkaline phosphatase expression, Nanog, endogenous Oct 4 and Sox 2, can form embryoid bodies and differentiate in-vitro, and can differentiate in-vivo as demonstrated by their ability to form teratomas when injected subcutaneously into SCID mice and generate germline chimeras through blastocyst injection.

**Storage:** For short term storage (1-2 weeks),  $-80^{\circ}\text{C}$  is suitable. For long term storage, store in liquid nitrogen. Long term storage at  $-80^{\circ}\text{C}$  may result in a loss of viability.

**Recovering your cells from Cryopreservation:** Place the frozen vial of cells in a  $37^{\circ}\text{C}$  water bath until contents are just thawed (2-3 minutes). Sanitize the vial by spraying with 70% ethanol, and quickly transfer the contents of the vial to a tube containing 3mL pre-warmed MEF media (DMEM + 10% FBS, 1x PenStrep), and centrifuge at 300g for 3 minutes. Aspirate the media, taking care not to disturb the cell pellet which, and resuspend the pellet in ES cell media containing LIF.

**Plating Recommendation:** iPS cells should be plated onto gelatinized tissue culture plates prepared with mitotically inactivated feeders and allowed to attach in a  $37^{\circ}\text{C}$ , 5%  $\text{CO}_2$  incubator. Culture in ES cell media containing LIF. Change media daily. Each vial of iPS cells should reach confluence within 48 hours of being plated to a 35mm tissue culture dish. Do not allow iPS cells to become over-confluent. Split iPS 1:3 – 1:5 every 2-3 days onto fresh feeders.

**Additional Cell Lines:** Validated (by teratoma assay) iPS lines generated from other mouse strains including B6, C3H, BALB/c, 129, DBA and CAST are also available.

[Contact](#) the core for additional information about these lines.

**Price:** \$200 per vial.