Induced Pluripotent Stem Cell (iPSC) Service



University of Wisconsin- Madison Waisman Center Cellular and Molecular Neuroscience Core

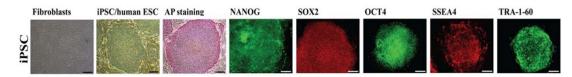


http://www.waisman.wisc.edu/CMNCore-services.htm

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GOAL: TO GENERATE IPSC FOR UW (AND NON-UW) RESEARCHERS

- Service started in 2009 with retroviral programming.
- Have generated iPSCs from 30+ cell sources, primarily neurodegenerative and neurodevelopmental disease-specific .



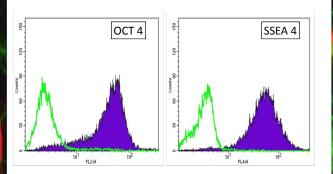
SERVICES INCLUDE:

- Fibroblast isolation from skin biopsy.
- Fibroblast reprogramming via episomal vectors.

(OCT4, SOX2, KLF4, MYC; Okita et al., Nature Methods 2011)

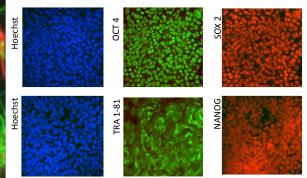
- 6 clones from each starting line.
- Mycoplasma testing of initial samples and resultant clones.
- Frozen vials of resultant clones.
- Pluripotency marker characterization.
- Blood reprogramming in development.

Flow Cytometry



Flow analysis was performed using a modified WiCell protocol. 92 % of cell were positive for OCT4 expression and 96% of cells were positive for SSEA4.

Immunofluorescence



Immunofluorescence for four common pluripotency markers (OCT 4, SOX 2, TRA 1-81, and NANOG) shows that iPSC colonies express pluripotency markers.



iPSC Service Director



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