

iPS Cell Media & Reagents

(James Thomson Lab, January 2008)

Freezing and Media for iPS cells is almost identical to regular ES media, except for the concentration of bFGF which is 100 ng/ml final concentration, 25x as much as regular ES media.

Cryopreservation and Resuspension media are the same as for ES cells.

Serum Free Media for human ES cells on MEFs: can last for 14 days
Final Concentration.

<i>Final Concentration</i>	<i>Amount for 250ml Stock solution</i>
80% DMEM-F12	200ml
20% KO Serum Replacer	50ml
1% Non-essential Amino Acids	2.5ml
1mM L-glutamine (see recipe)	2.5ml
0.1mM b-mercaptoethanol	part of L-glutamine
100ng/ml bFGF	25 ug

L-glutamine stock solution: Prepare on a per-use basis

- * 0.146g L-glutamine
- * 10ml Ca/Mg free PBS
- * 7 ul b-mercaptoethanol

iPS cells are very sensitive to quality of MEFs and the freshness of the KOSR. The KOSR you add to your media should not be older than 4-5 days (freezing down aliquots is fine). Bad MEFs with fresh KOSR (or vice versa) and your cells will be okay, but bad MEFs with old KOSR and your cells will look awful.