Materials List for:

Generation of Mice Derived from Induced Pluripotent Stem Cells

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Materials

<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
<th>Catalog Number</th>
<th>Comments</th>
</tr>
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<tbody>
<tr>
<td>DMEM (high glucose)</td>
<td>Invitrogen</td>
<td>11965-092</td>
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<tr>
<td>ES cell qualified FBS</td>
<td>Invitrogen</td>
<td>104392-024</td>
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<tr>
<td>FBS</td>
<td>Invitrogen</td>
<td>16140-071</td>
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<td>Glutamax</td>
<td>Invitrogen</td>
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<tr>
<td>β-Mercapt–thanol</td>
<td>Sigma</td>
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<td>0.1% Gelatin</td>
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<tr>
<td>MEM Non-Essential Amino Acids</td>
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<td>Medium 199</td>
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<td>DMSO</td>
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<td>PBS Ca²⁺/Mg²⁺</td>
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<td>PBS Ca²⁺/Mg²⁺ free</td>
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<td>Pregnant mare serum gonadotropin, for superovulation, freeze-dried, 2,000 IU</td>
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<td>Chorionic gonadotropin, human</td>
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<td>FHM medium with Hyaluronidase</td>
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<td>KSOM-1/2 AA medium</td>
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<td>FHM</td>
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<td>Water, for embryo transfer, embryo tested</td>
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<td>Bovine serum albumin (BSA), embryo tested</td>
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<td>Mouse embryonic fibroblasts, non-irradiated</td>
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<td>PMEF-CFL</td>
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</table>

Media and buffers used in this protocol

HEK293T growth medium. 90% DMEM, 10% FBS, 100 U/ml penicillin and 10 mg/ml streptomycin. Exclude penicillin and streptomycin from HEK media used on day of transfection. HEK medium can be stored at 4 °C for up to 1 month.
2x HBS. 42 mM Hepes, 274 mM NaCl, 10 mM KCl, 1.5 mM Na₂HPO₄·7H₂O, 12 mM Dextrose. pH to 7.1 +/- 0.1. pH is critical! Sterile filter and store at 4 °C.

Mouse embryonic fibroblast (MEF) growth medium (also for use with feeders). 70% DMEM, 20% Medium 199, 10% FBS, 100 U/ml penicillin and 10 mg/ml streptomycin. Store at 4 °C for up to 1 month.

ESC growth medium. 85% DMEM, 15% ES cell qualified FBS, 1x Glutamax, 0.1 mM non-essential amino acids, 0.1 mM β-mercapt–thanol, 1,000 U/ml ESGRO, 100 U/ml penicillin and 10 mg/ml streptomycin. ESC media can be stored at 4 °C for up to three weeks.

Electrofusion medium. 0.3 M Mannitol, 0.1 mM MgSO₄, 50 mM CaCl₂, and 3% BSA in embryo tested water. Store at 4 °C for up to 3 months.