

Table S1 Media components of TeSR, E8 and ON2

| Components | TeSR ^[1] | E8 ^[2] | ON2 | Storage |
|---|---------------------|-------------------|-----|---------|
| DMEM/F12 | | | | |
| NaHCO ₃ | | | | |
| L-Ascorbic Acid | | | | |
| Selenium | | | | |
| Insulin | | | | |
| Transferrin | | | | |
| FGF2 | | | | |
| TGFβ1 | | | | |
| Albumin | | | | |
| Pipecolic acid | | | | |
| LiCl | | | | |
| GABA | | | | |
| Glutathione | | | | |
| L-Glutamine | | | | |
| Defined lipids | | | | |
| Thiamine | | | | |
| Trace elements B | | | | |
| Trace elements C | | | | |
| β-mercaptoethanol | | | | |
| NODAL | | | | |
| Activin A ^[3-5] | | | | |
| LIF ^[6-8] | | | | |
| Chondroitin sulfate ^[9] | | | | |
| Note 1: In E8 media, NODAL and TGFβ1 are interchangeable in maintaining ES and iPS cells. | | | | |
| Note 2: It is recommended to all three media that before use, thaw and mix supplement to basal medium to make into complete medium, which should be stored at 4°C temporary and used within two weeks. | | | | |

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[4] Osnato, A., et al., TGFbeta signalling is required to maintain pluripotency of human naive pluripotent stem cells. Elife, 2021. 10.

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- [8] Ware Carol, B., et al., Derivation of naïve human embryonic stem cells. *Proceedings of the National Academy of Sciences*, 2014. 111(12): p. 4484-4489.
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Table S2 Primers used in qRT-PCR analysis

| Primer | Sequence |
|--------|--|
| GAPDH | F: ACCACAGTCCATGCCATCAC R: TCCACCACCCTGTTGCTGTA |
| OCT3/4 | F: GACAGGGGGAGGGGAGGAGCTAGG R: CTTCCCTCCAACCAGTTGCCCAAAC |
| NANOG | F: CAGCCCCGATTCTTCCACCAAGTCCC R: CGGAAGATTCCCAGTCGGGTTCAACC |
| SOX2 | F: GGGAAATGGGAGGGGTGCAAAAGAC R: TTGCGTGAGTGTGGGATTGGTG |
| KLF4 | F: CGCCTCCTGCTTGATCTTGGG R: GACCCATCCTCCGGAGTCAGT |