Supplementary Table 1. HTF composition

|  |  |
| --- | --- |
| Reagent | mg/100 ml |
| NaCl (Fujifilm Wako Pure Chemical Corporation, Osaka, Japan) | 581.7 |
| KCl (Fujifilm Wako Pure Chemical Corporation) | 35 |
| MgSO₄・7H₂O (NACALAI TESQUE,INC., Kyoto, Japan) | 5 |
| KH₂PO₄ (Fujifilm Wako Pure Chemical Corporation) | 5 |
| NaHCO₃ (Fujifilm Wako Pure Chemical Corporation) | 210 |
| D-Glucose (Fujifilm Wako Pure Chemical Corporation) | 50 |
| Na-pyruvate (Fujifilm Wako Pure Chemical Corporatin) | 3.6 |
| Na-lactate (Sigma-Aldrich) | 0.4 (ml) |
| PenicillinG (MP Biomedicals, LLC, Irvine, CA, USA) | 10 |
| Hypotaurine (Sigma-Aldrich) | 11 |
| CaCl₂・2H₂O (Fujifilm Wako Pure Chemical Corporation) | 30 |
| BSA (Merck KGaA, Darmstadt, Germany) | 300 |

Supplementary Table 2. HEPES-buffered CZB composition

|  |  |
| --- | --- |
| Reagent | mg/100 ml |
| NaCl (Fujifilm Wako Pure Chemical Corporation) | 476 |
| KCl (Fujifilm Wako Pure Chemical Corporation) | 36 |
| MgSO₄・7H₂O (NACALAI TESQUE,INC.) | 29 |
| KH₂PO₄ (Fujifilm Wako Pure Chemical Corporation) | 16 |
| EDTA・2Na (DOJINDO, Kumamoto, Japan) | 4 |
| NaHCO₃ (Fujifilm Wako Pure Chemical Corporation) | 42 |
| Na-lactate (Sigma-Aldrich) | 0.53 (ml) |
| Hepes (Sigma-Aldrich) | 520 |
| D-Glucose (Fujifilm Wako Pure Chemical Corporation) | 100 |
| Na-pyruvate (Fujifilm Wako Pure Chemical Corporation) | 3 |
| L-Glutamine (Sigma-Aldrich) | 15 |
| PenicillinG (MP Biomedicals, LLC) | 5 |
| Streptomycin (MP Biomedicals, LLC) | 7 |
| PVA (Sigma-Aldrich) | 10 |
| Phenol red (Sigma-Aldrich) | Small amount |

Supplementary Table 3. CZB composition

|  |  |
| --- | --- |
| Reagent | mg/100 ml |
| NaCl (Fujifilm Wako Pure Chemical Corporation) | 476 |
| KCl (Fujifilm Wako Pure Chemical Corporation) | 36 |
| MgSO₄・7H₂O (NACALAI TESQUE,INC.) | 29 |
| KH₂PO₄ (Fujifilm Wako Pure Chemical Corporation) | 16 |
| EDTA・2Na (DOJINDO) | 4 |
| NaHCO₃ (Fujifilm Wako Pure Chemical Corporation) | 211 |
| Na-lactate (Sigma-Aldrich) | 0.53 (ml) |
| D-Glucose (Fujifilm Wako Pure Chemical Corporation) | 100 |
| PenicillinG (MP Biomedicals, LLC) | 5 |
| Streptomycin (MP Biomedicals, LLC) | 7 |
| Phenol red (Sigma-Aldrich) | Small amount |
| Na-pyruvate (Fujifilm Wako Pure Chemical Corporation) | 3 |
| L-Glutamine (Sigma-Aldrich) | 15 |
| CaCl₂・2H₂O (Fujifilm Wako Pure Chemical Corporation) | 25 |
| BSA (Merck KGaA) | 500 |