

## Supplementary Information for

## Mini Bioreactor Can Support *In Vitro* Spermatogenesis of Mouse Testicular Tissue

Zahra Amirkhani, Ph.D.1, Mansoureh Movahedin, Ph.D.1, Nafiseh Baheiraei, Ph.D.2, Ali Ghiaseddin, Ph.D.3

- Department of Anatomical Sciences, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran
  Tissue Engineering and Applied Cell Sciences Division, Department of Anatomical Sciences, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran
  Adjunct Research Associate Professor at Chemistry Department, Michigan State University, East Lansing, MI, USA

\*Corresponding Address: P.O.Box: 14115-331, Department of Anatomical Sciences, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran

Email: movahed.m@modares.ac.ir

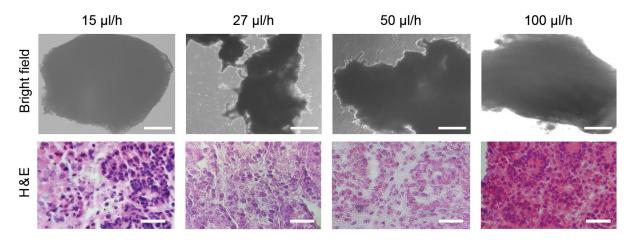


Fig.S1: Photomicrographs and H&E staining of testicular tissue culture in mini-perfusion bioreactor. For the best flow rate, histological analysis was done for the testicular tissue culture.

Table S1: Primers used for real-time quantitative reverse transcription polymerase chain reaction

| Gene name | Primer sequence (5'-3') | Accession number | Length (bp) |
|-----------|-------------------------|------------------|-------------|
| Tekt1     | F: GCTGGCTGAACATCTGG    | XM_006532933.3   | 91          |
|           | R: TTCTTGCTGCGTGATGGC   |                  |             |
| Tnp1      | F: TGTGATGCGGCAATGAGC   | NM_009407.2      | 142         |
|           | R: CGACTGGGATTTACCCACTC |                  |             |
| Plzf      | F: GCTGCTGTCTCTGTGATGG  | NM_001033324.3   | 154         |
|           | R: GGGCTGATGGAACATAGGGG |                  |             |
| β-actin   | F: TCAGAGCAAGAGAGGCATCC | NM_009608.4      | 187         |
|           | R: GGTCATCTTCTCACGGTTGG |                  |             |