Table S1.Components of TMRL Enrichment Medium for microalgal cultivation (Shah, 2014).

|  |  |  |
| --- | --- | --- |
| **Constituents** | **Amount** | **Distilled water** |
| KNO3 | 100 g | 1000 mL |
| Na2HPO4.12H2O | 10 g | 1000 mL |
| FeCl3.6H2O | 3 g | 1000 mL |
| Na2SiO3. 9H2O | 1 g | 1000 mL |

Table S2.Preparation of the AgNPs-MEs-CHL co-application (Anticancer).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Ratio** | **AgNPs**  **(Stock 10 mg/mL)** | **MCEs**  **(Stock 10 mg/mL)** | **Media (MEM, RPMI)** | **Total volume** | **Concentration** |
| 1:1 | 15 µL | 15 µL | 2,970 µL | 3 mL | 100 µg/ mL,  serial dilution to 50, 25, 12.5, 6.25, 3.125, 0 µg/ mL |
| 1.5:1 | 18 µL | 12 µL | 2,970 µL | 3 mL |
| 2:1 | 20 µL | 10 µL | 2,970 µL | 3 mL |
| 1.5:3 | 15 µL | 30 µL | 3,955 µL | 4 mL |

Table S3. Preparation of the AgNPs-MEs co-application (Antioxidant)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Ratio** | **AgNPs**  **(Stock 10**  **mg/mL)** | **MCE**  **(Stock 10**  **mg/mL)** | **Total volume** | **Volume per well** | **Concentration** |
| 1:1 | 1.5 mL | 1.5 mL | 3 mL | 20 µL | First well 10 mg/mL, serial dilution with DMSO (5, 2.5, 1.25, 0.625, 0.313, 0.156, 0 mg/mL) |
| 1.5:1 | 1.8 mL | 1.2 mL | 3 mL | 20 µL |
| 2:1 | 2 mL | 1 mL | 3 mL | 20 µL |