**Table S1. Composition of the SBF, DMEM and artificial saliva used in this work**

|  |  |  |  |
| --- | --- | --- | --- |
| Component | SBF  (mM) | DMEM  (mM) | Artificial Saliva (mM) |
| Na+ | 142.0 | 154.5 | 11.9 |
| K+ | 5 | 5.4 | 15.4 |
| Mg2+ | 1.5 | 0.8 | 0.53 |
| Ca2+ | 2.5 | 1.8 | 1.09 |
| Cl- | 147.8 | 114.9 | 27.9 |
| HCO3- | 4.2 | 44.0 | - |
| HPO42- | 1 | 0.9 | 2.09 |
| SO42- | 0.5 | 0.8 | - |
| D-glucose | - | 5.6 | - |
| L-Glutamine  Pyruvic-acid Na | -  - | 4.0  0.21 | -  - |
| Phenol-red.Na | - | 0.04 | - |
| Total Vitamins  Total Amino Acids | -  - | 0.03\*  2.25\* | -  - |
| Methylparaben | - | - | 6.8 |
| Liquid sorbitol | - | - | 136.7 |
| Carboximethyl cellulose | - | - | 31.6 |
| pH | 7.2-7.4 | 7.4 | 7.2 |

\*Concentration of total amino acids and vitamins: g/L.