**Supporting Information**

Synthesis of gold nanoparticles with buffer-dependent variations of size and morphology in biological buffers

Syed Rahin Ahmed1,‡, Sangjin Oh2,‡, Rina Baba3, Hongjian Zhou4,Sungu Hwang5, Jaebeom Lee2,[[1]](#footnote-1)\*, and Enoch Y. Park1,6,\*

1 Research Institute of Green Science and Technology, Shizuoka University, 836 Ohya Suruga-ku, Shizuoka, 422-8529, Japan

2 Department of Cogno-Mechatronics Engineering, Pusan National University, Busan, 46279, Korea

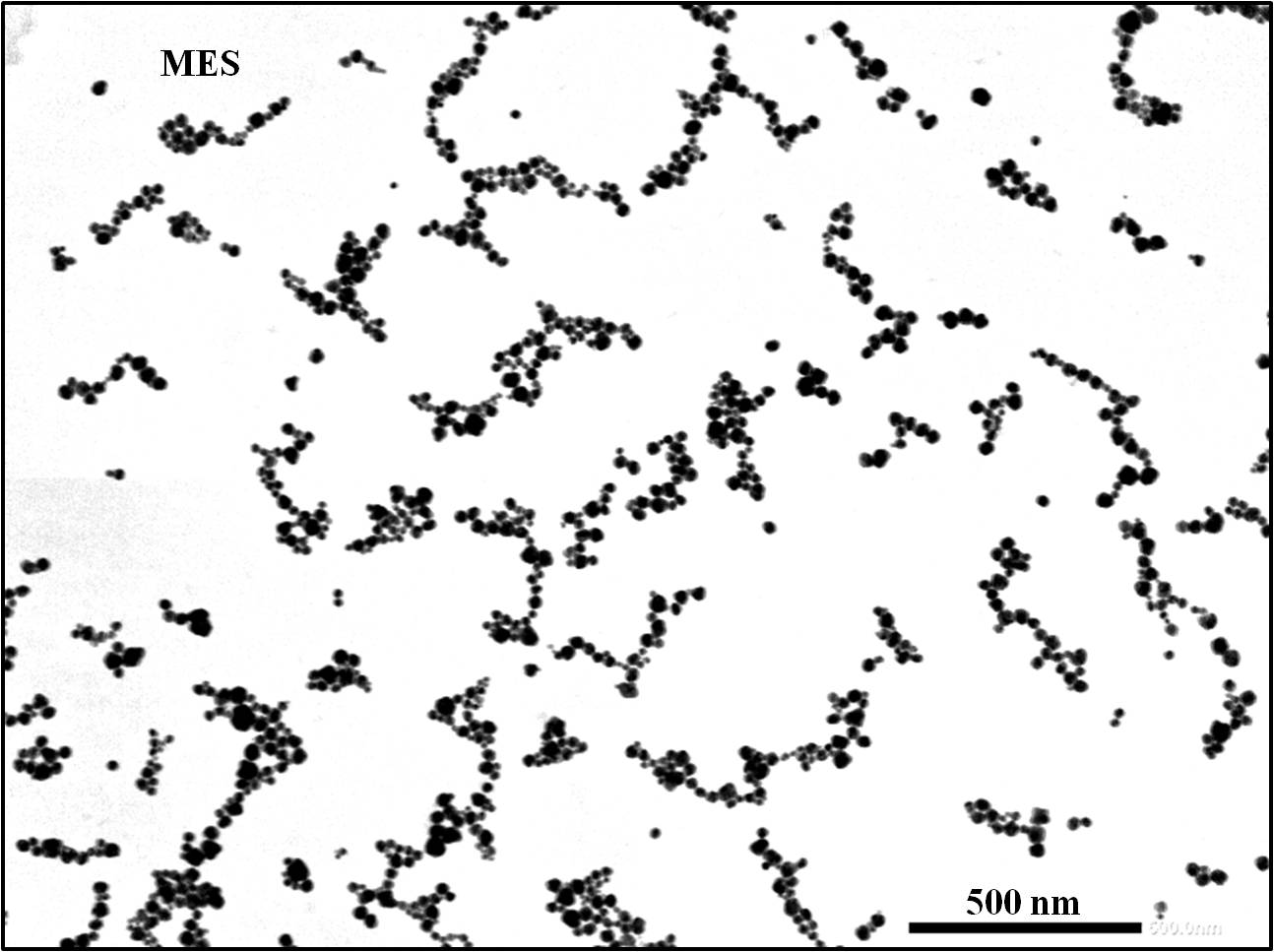
3 Department of Applied Biological Chemistry, Shizuoka University, 836 Ohya Suruga-ku, Shizuoka 422-8529, Japan

4 Institute of Solid State Physics, Chinese Academy of Sciences, Hefei, 230031, P. R. China

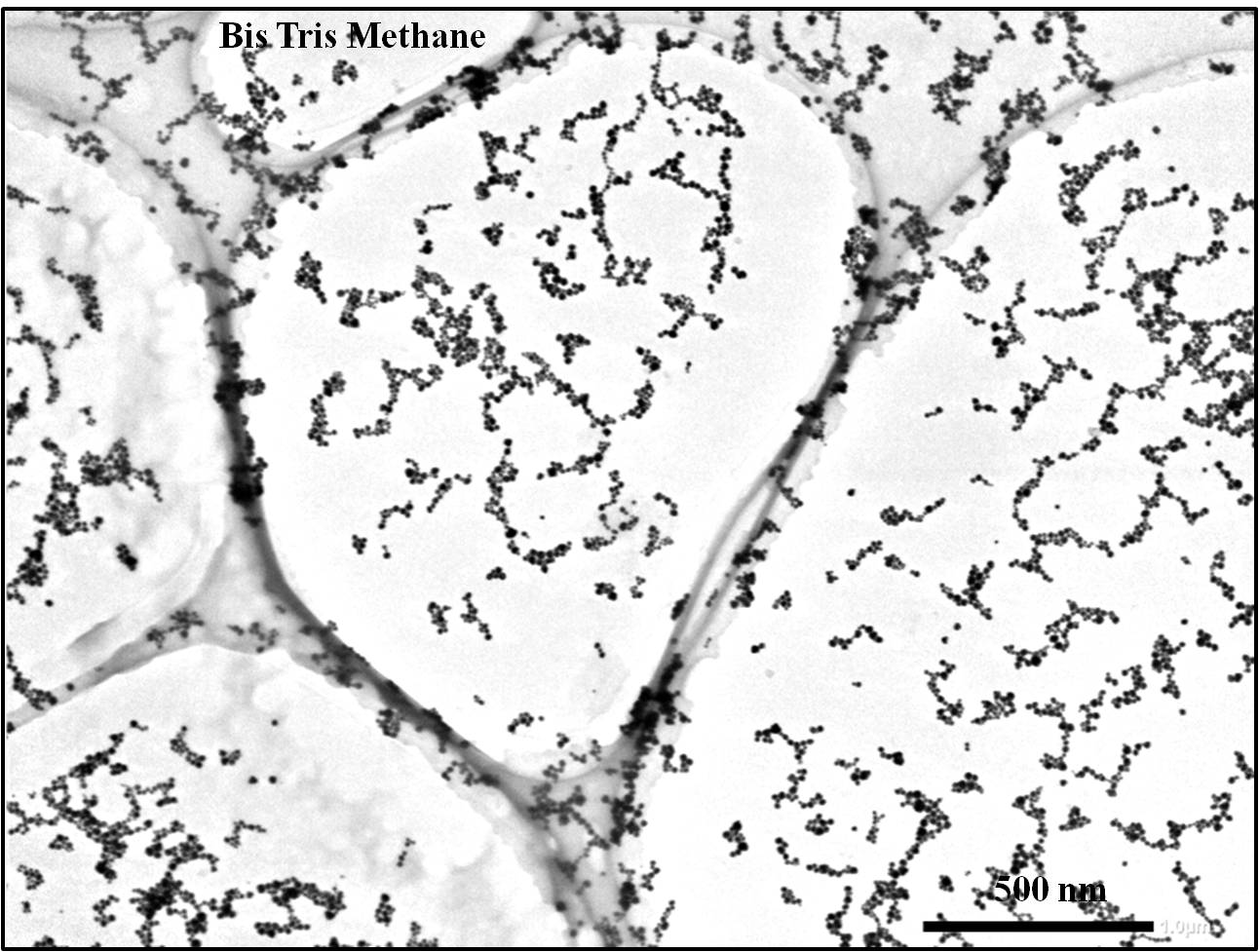
5 Department of Nanomechatronics Engineering, Pusan National University, Miryang 627-706, Korea

6 Graduate School of Science and Technology, Shizuoka University, 836 Ohya Suruga-ku, Shizuoka 422-8529, Japan.

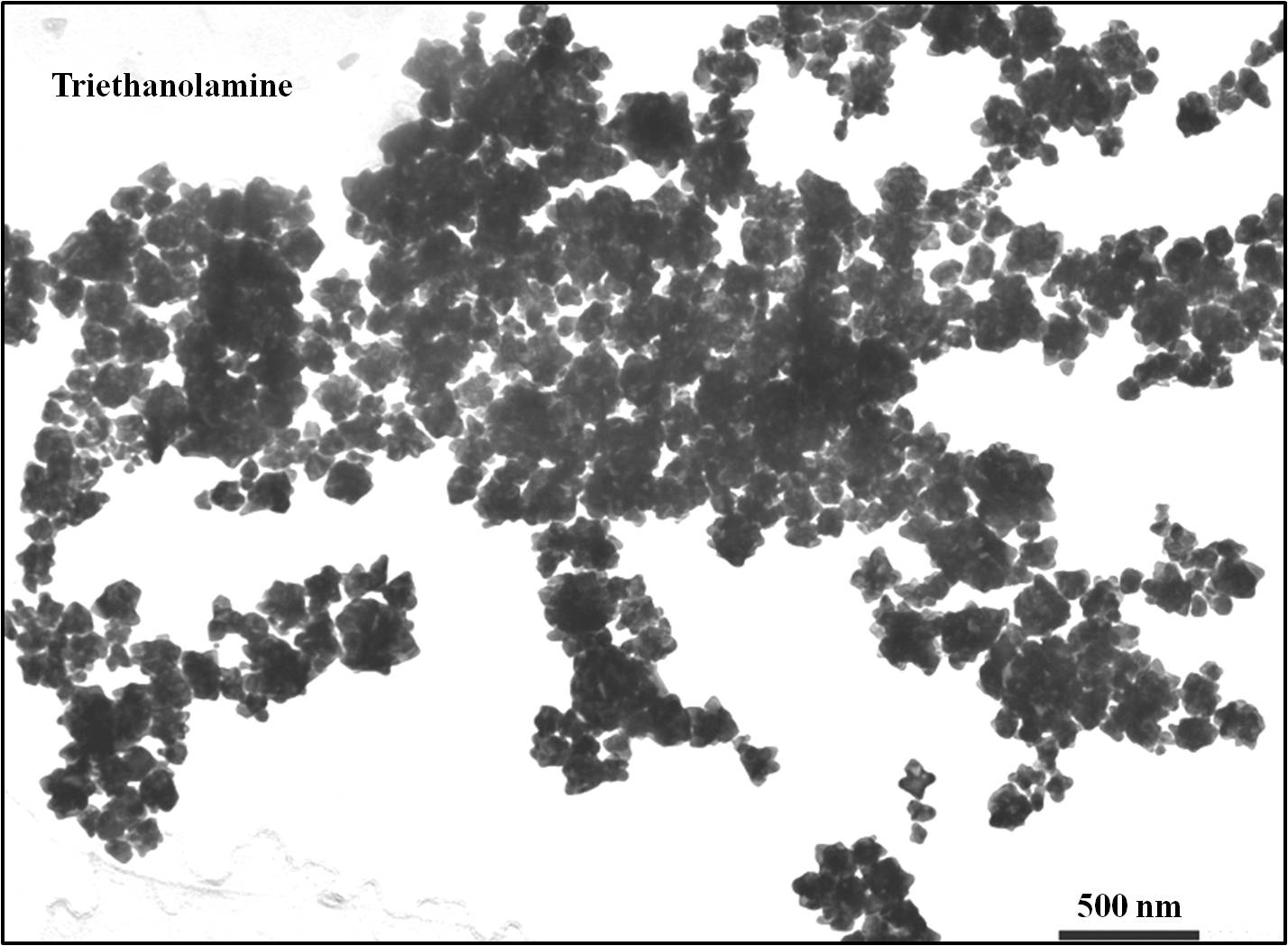
**Keywords:** Gold nanoparticles, Good’s buffer, Synthesis route, MD simulation, Cell viability



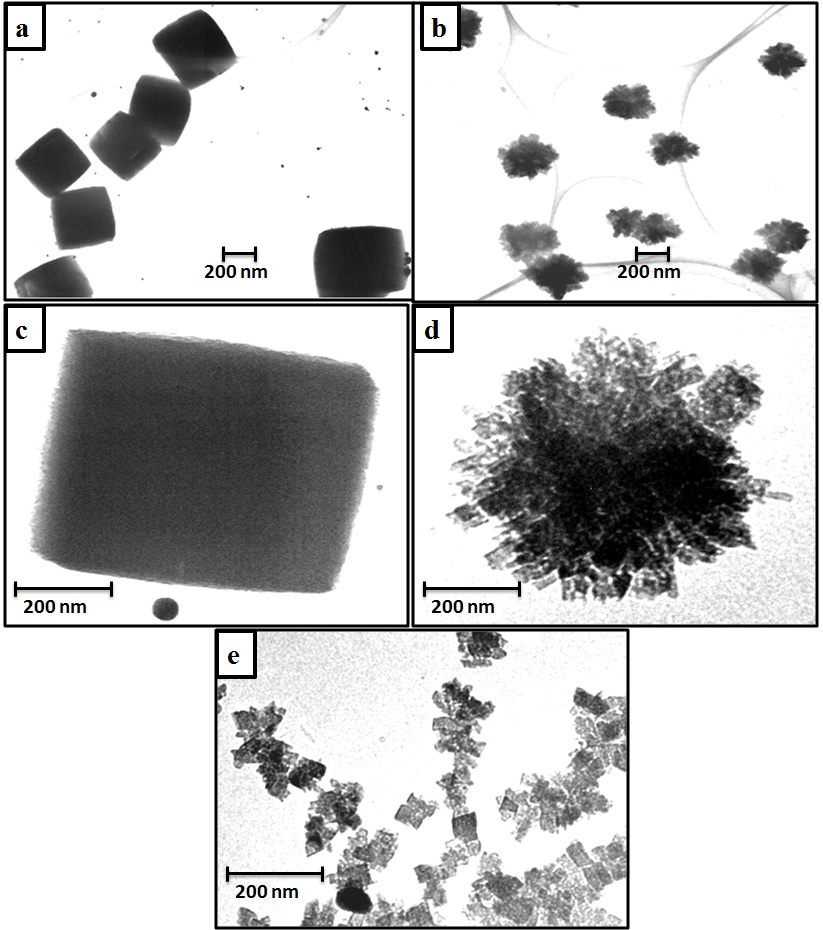
**Figure S1:** Far View TEM image of Au NPs synthesized by MES buffer.



**Figure S2:** Far View TEM image of Au NPs synthesized by Bis Tris Methane buffer.



**Figure S3:** Far View TEM image of Au NPs synthesized by Triethanolamine buffer.



**Figure S4:** TEM images of unreacted buffer salts.

1. \*Corresponding authors: jaebeom@pusan.ac.kr (JL), park.enoch@shizuoka.ac.jp (EYP)

   ‡Both contributed equally. [↑](#footnote-ref-1)