

Ultrasensitive Electrochemical Immunosensor for Oral Cancer Biomarker IL-6 using Carbon Nanotube Forest Electrodes and Multilabel Amplification

Ruchika Malhotra, Vyomesh Patel, Jose Pedro Vaqué, J. Silvio Gutkind, and James F. Rusling

Supplementary Data

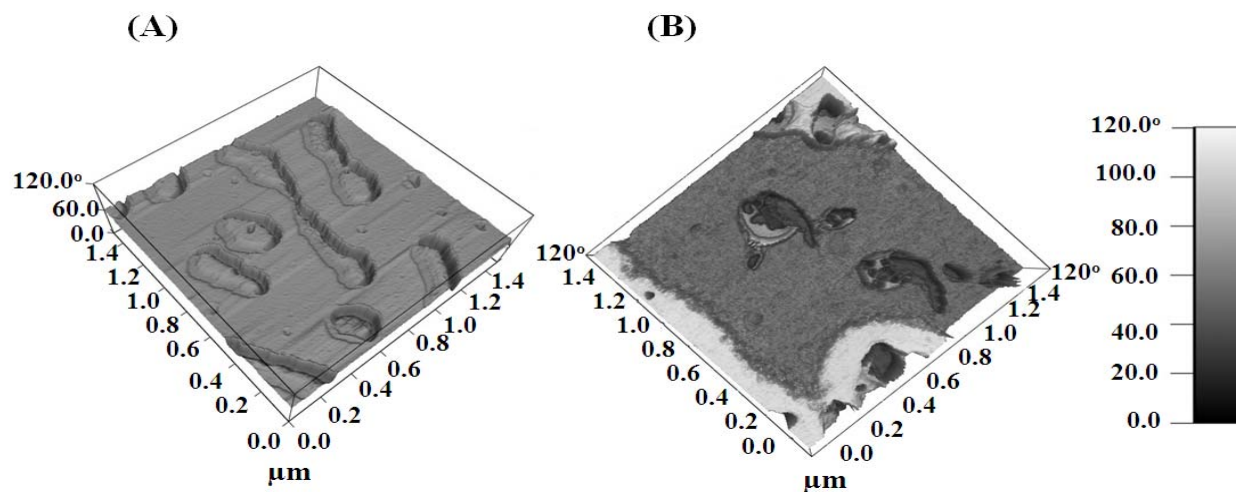


Figure S1. Phase contrast AFM images of sonicated, surface carboxylated multiwall CNTs isolated on a smooth freshly cleaved mica surface (A) multiwall CNTs not linked with protein; (B) derivatized as biotin-Ab₂-MWNT-HRP bioconjugate.

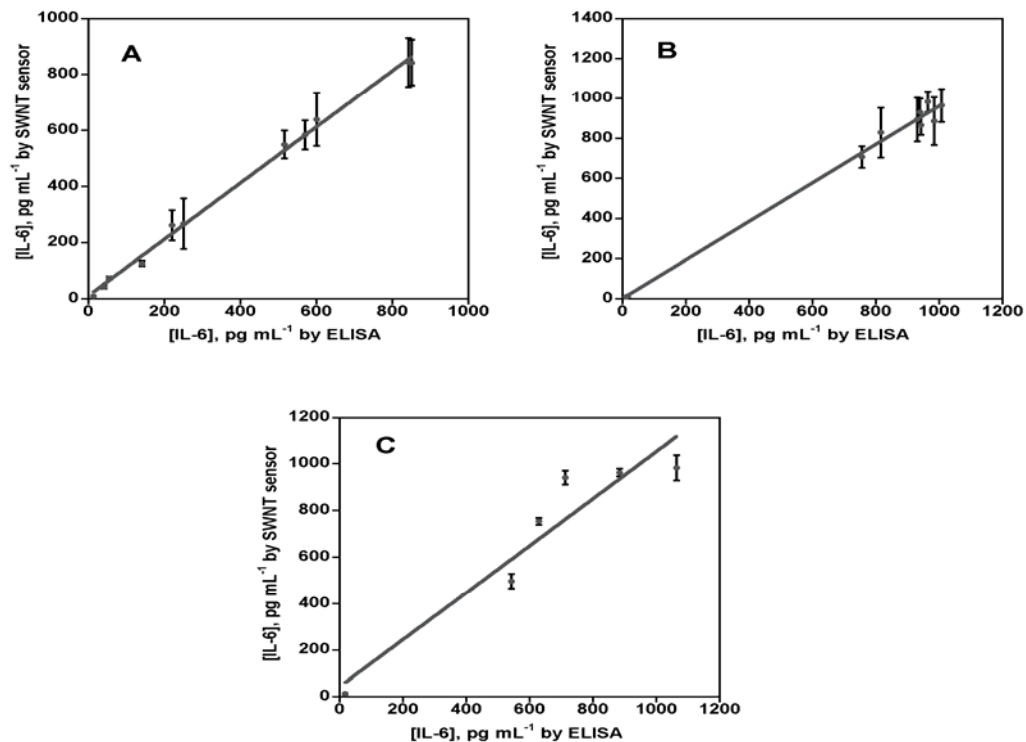


Figure S2. Correlation plots of SWNT sensor results for conditioned media samples against results from ELISA determinations for the same samples (A) control conditioned media, (B) representative HNSCC conditioned media, (C) sub-set of representative HNSCC conditioned media.

Table 1S. Slopes and Intercepts of correlation plots of SWNT sensor results for conditioned media samples against results from ELISA determinations for the same samples.

Conditioned media (Fig.)	Slope \pm SD	Intercept \pm SD
Control conditioned media (S2A)	0.99 ± 0.02	-10.6 ± 9.2
Representative HNSCC conditioned media (S2B)	1.03 ± 0.03	4.8 ± 27.4
Sub-set HNSCC conditioned media (S2C)	0.89 ± 0.14	18.8 ± 111.9