## Supporting Information

## Development of 6E3 Antibody-Mediated SERS Immunoassay for Drug-Resistant Influenza Virus

Hyeran Kim, Hyunju Kang, Hye-Nan Kim, Hongki Kim, Jeong Moon, Kyeonghye Guk, Hwangseo Park, Dongeun Yong, Pan Kee Bae, Hyun Gyu Park, Eun-Kyung Lim,\* Taejoon Kang,\* and Juyeon Jung<sup>\*</sup>



(Scale bar = 500 nm)

**Figure S1.** SEM images of Au NPs-on-nanoplate structures after the detection of H275Y pH1N1 (0,  $10^2$ ,  $10^3$ ,  $10^4$ ,  $10^5$  PFU/mL).



**Figure S2.** (A) SERS spectra of MGITC as a function of H275Y pH1N1 concentration (0,  $10^2$ ,  $10^3$ ,  $10^4$ , and  $10^5$  PFU/mL) in WT pH1N1 ( $10^5$  PFU/mL). (B) Plot of integrated 1,615 cm<sup>-1</sup> band intensity *versus* H275Y pH1N1 concentration (0,  $10^2$ ,  $10^3$ ,  $10^4$ , and  $10^5$  PFU/mL) in WT pH1N1 ( $10^5$  PFU/mL). Error bars = standard deviation (n = 10).



Figure S3. Full SERS spectra corresponding to Figure 5C.



**Figure S4.** Normalized Ct value *versus* no template control, bare, WT pH1N1-spiked, and H275Y-spiked human nasopharyngeal aspirate samples. Error bars = standard deviation (n = 3).