

Supplementary Information

Effect of potential on temperature-dependent SERS spectra of neuromedin B on Cu electrode

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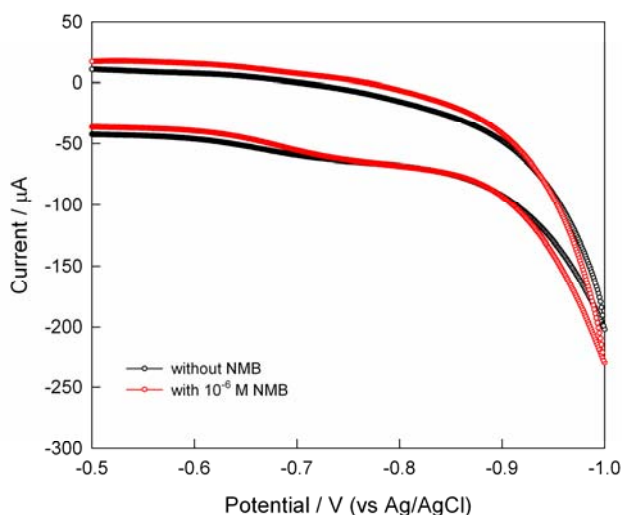


Fig. S1. Cyclic voltammograms of Cu electrode in 0.01 M phosphate buffer (pH 7.0) containing 0.1 M Na₂SO₄ without peptide (black line) and in the presence of 10⁻⁵ M NMB (red line). Potential sweep rate is 50 mV/s.

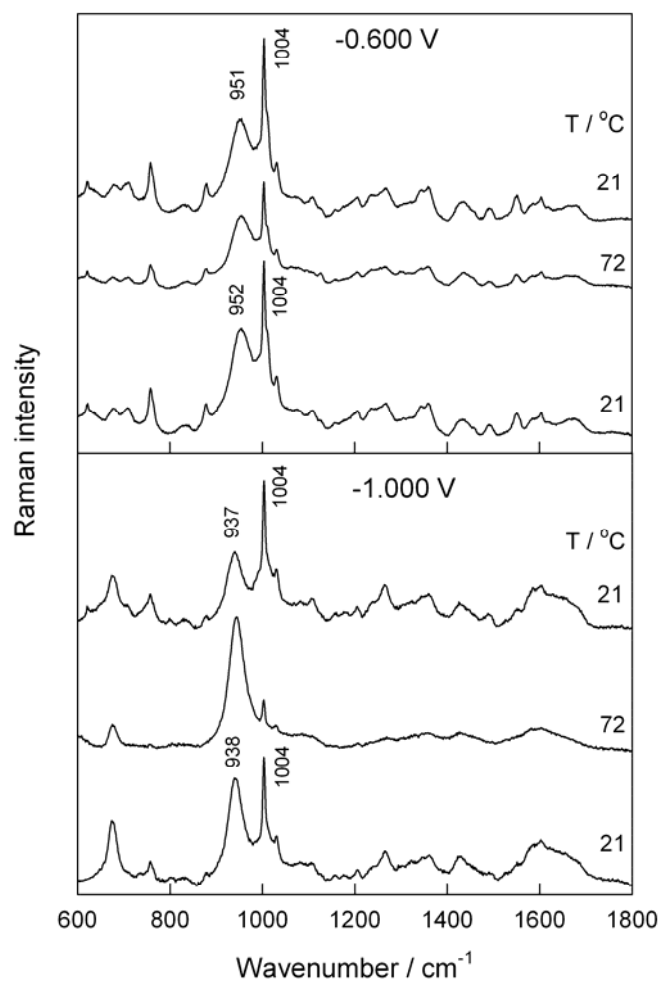


Fig. S2. Temperature-dependent reversibility of SERS spectra of adsorbed NMB (10^{-5} M) on Cu electrode at -0.600 V and -1.000 V potentials immersed in 0.01 M phosphate buffer (pH 7.0) containing 0.1 M Na_2SO_4 . Upper curves show initial spectra.

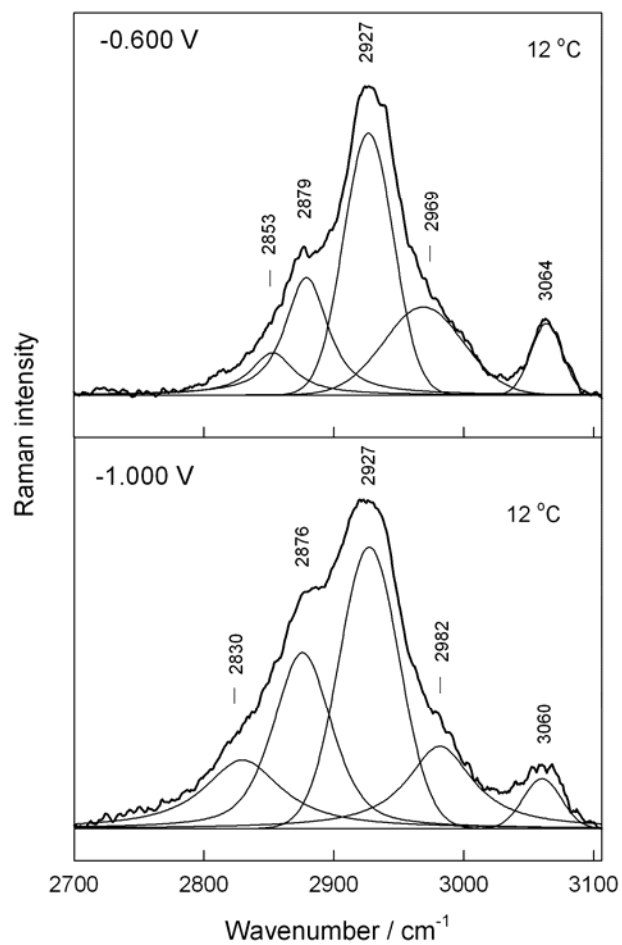


Fig. S3. SERS spectra of NMB adsorbed on Cu electrode at -0.600 and -1.000 V potentials in the $2700\text{--}3106$ cm^{-1} range with fitted Gaussian-Lorentzian line shapes.

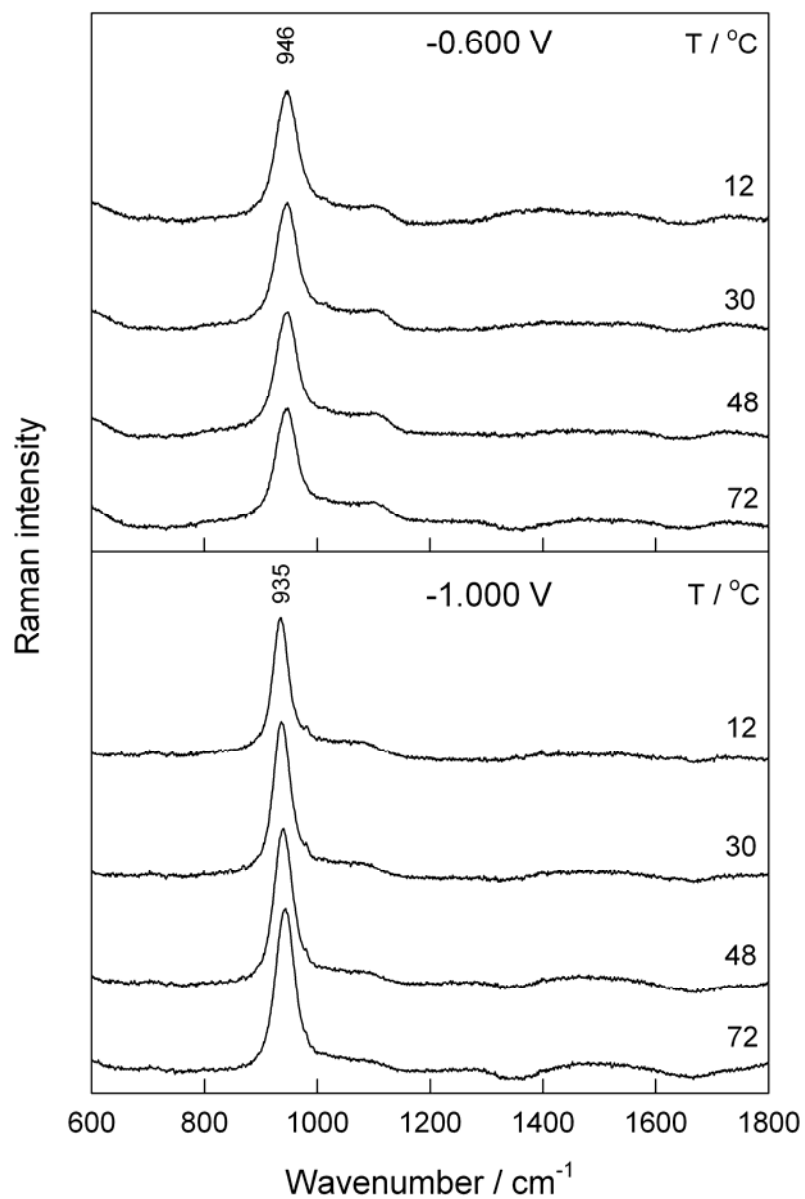
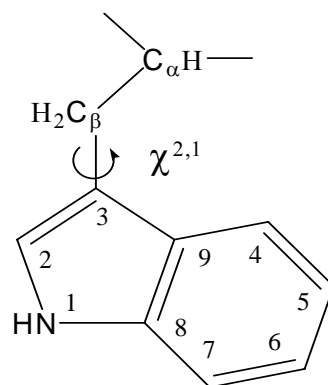


Fig. S4. Temperature dependence of SERS spectra of phosphate anions adsorbed on Cu electrode in the wavenumber region of $600 - 1800\text{ cm}^{-1}$ at -600 and -1.000 V electrode potentials. Measurements conditions: 0.01 M phosphate buffer (pH 7.0) containing $0.1\text{ M Na}_2\text{SO}_4$; excitation wavelength, 785 nm ; laser power at the sample, 30 mW ; integration time, 300 s .



Scheme S1. Atom numbering scheme of the indole ring of Trp.