Single-label fluorescent derivatization method for quantitative analysis of neurotoxin in vivo by capillary electrophoresis coupled with laser-induced fluorescence detection

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Optimizing the significant factors affecting NT derivatization yield, such as reaction time, and temperature, pH of the reaction medium, and the molar ratio of FITC to NT.

Investigation of linear calibration curve for FITC-NT analysis ranging from 0.01 to 1.00 ug mL⁻¹ by CE-LIF.

Assessment of the reproducibility of peak area at three concentration levels for at least 23 runs.
Figure S-1 Buffer pH optimization for NT derivatization with FITC (fold line) and effect of molar ratio of FITC to NT on the reaction yield of the derivatized NT (column).

Figure S-2 Effect of reaction temperature on the time course of yield of the derivatized NT

Figure S-3 Linear calibration curve for FITC-NT analysis ranging from 0.01 to 1.00 ug mL⁻¹ by CE-LIF.
Figure S-4 Repeatability of peak area at three concentration levels after optimizing rinsing procedure and electrolyte composition for CE-LIF. Peak area were stable for at least 23 runs.

Figure S-5 pure NT-FITC analysis chromatogram using UV detector and fluorescence detector.