

## Supramolecular self-assembly of fluorescent peptide amphiphiles for accurate and reversible pH measurement

Leixia Mei<sup>a</sup>, Suyun He<sup>a</sup>, Li Zhang<sup>a</sup>, Keming Xu<sup>\*a</sup> and Wenyong Zhong<sup>\*ab</sup>

<sup>a</sup>Department of Analytical Chemistry, China Pharmaceutical University, Nanjing, P. R. China.

<sup>b</sup>Key Laboratory of Biomedical Functional Materials, China Pharmaceutical University, Nanjing 210009, P. R. China.

E-mail: [wyzhong@cpu.edu.cn](mailto:wyzhong@cpu.edu.cn); [xus1019@163.com](mailto:xus1019@163.com)

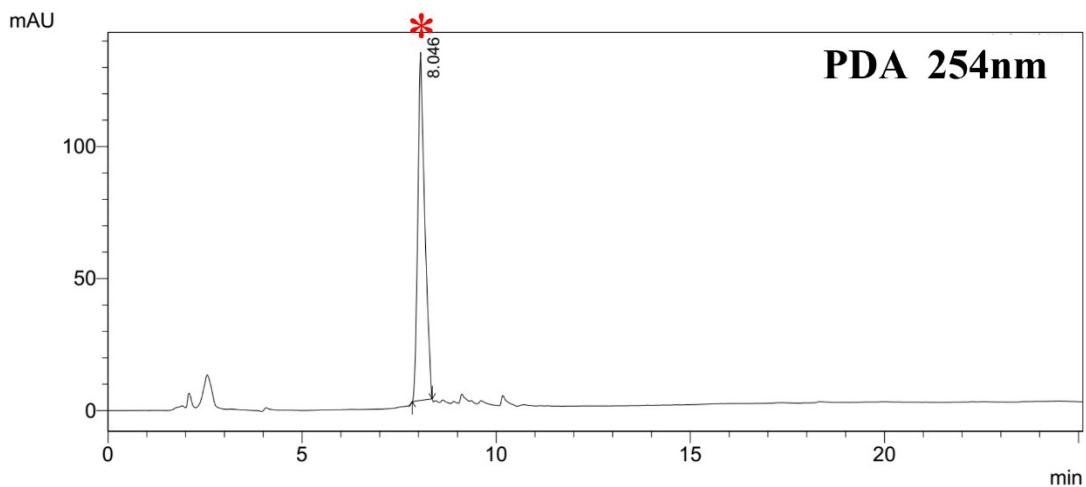
## Table of Content

**Figure S1.** HPLC elution curve of NBD-PA.

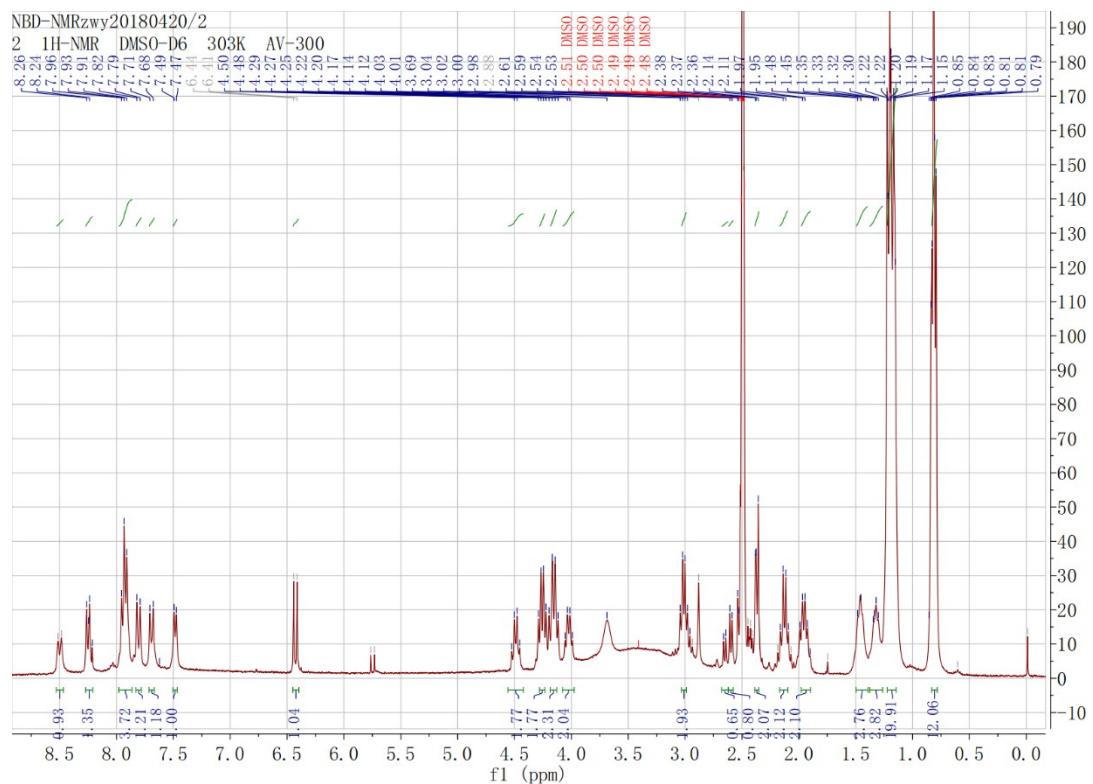
**Figure S2.** <sup>1</sup>HNMR spectrum of NBD-PA (300 MHz, DMSO).

**Figure S3.** TOF-MS spectrum of NBD-PA: m/z 1018.6 [M-H].

**Figure S4.** The curves used to determine the CMC value of NBD-PA.

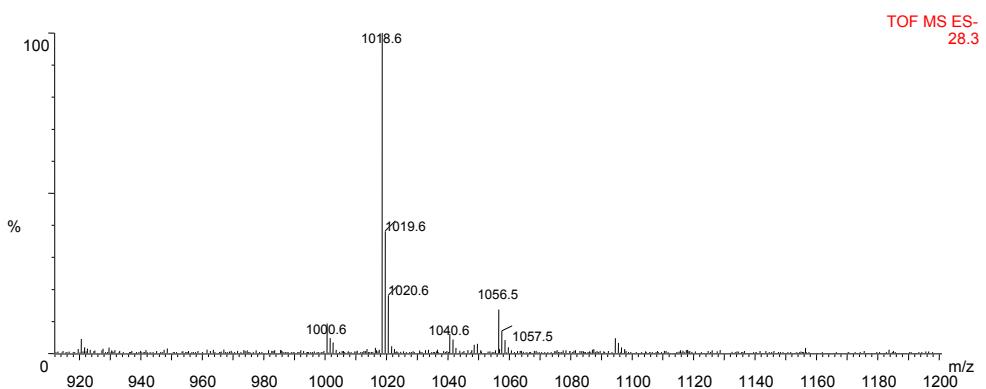


**Figure S1.** HPLC elution curve of NBD-PA. The HPLC conditions were as follows: a linear gradient of 10% to 90% of acetonitrile over 25 min at a flow rate of 1.0 mL min<sup>-1</sup>, detected at 254 nm. \*: The peak of NBD-PAs. Purity: >90%

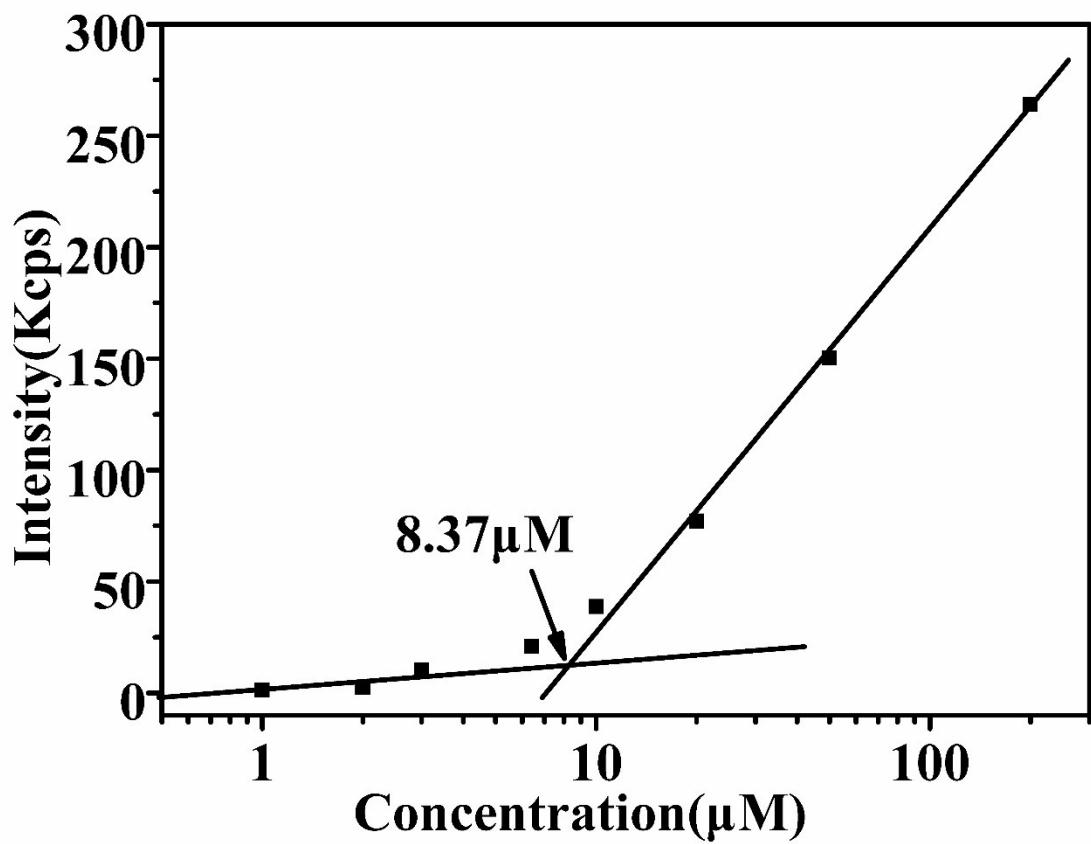


**Figure S2.**  $^1\text{H}$ NMR spectrum of NBD-PA (300 MHz, DMSO).

<sup>1</sup>H NMR (300 MHz, DMSO) δ 8.51-7.68 (d, J = 9 Hz, 8H), 7.48 (d, J = 6 Hz, 1H), 6.43 (d, J = 9 Hz, 1H), 4.48(m, 2H), 4.26( m, 2H), 4.16 (m, 2H), 4.02 (m, 2H), 3.01( m, 2H), 2.65 (m, 1H), 2.60 (m, 1H), 2.37(t, J = 3,6 Hz, 2H), 2.13 (d, J = 6,4Hz, 2H), 1.95 (d, J = 9, 6 Hz, 2H), 1.46 (m, 3H), 1.32 (m, 3H), 1.22 – 1.15 (m, 20H), 0.85 – 0.79 (m, 12H).



**Figure S3.** TOF-MS spectrum of NBD-PA: m/z 1018.6 [M-H].



**Figure S4.** The curves used to determine the CMC value of NBD-PA.