

## Supporting information

### Synthesis of A New Bifunctionalized Fluorescent Label and Physical Properties of the Bound Form on Model Peptide of Troponin C

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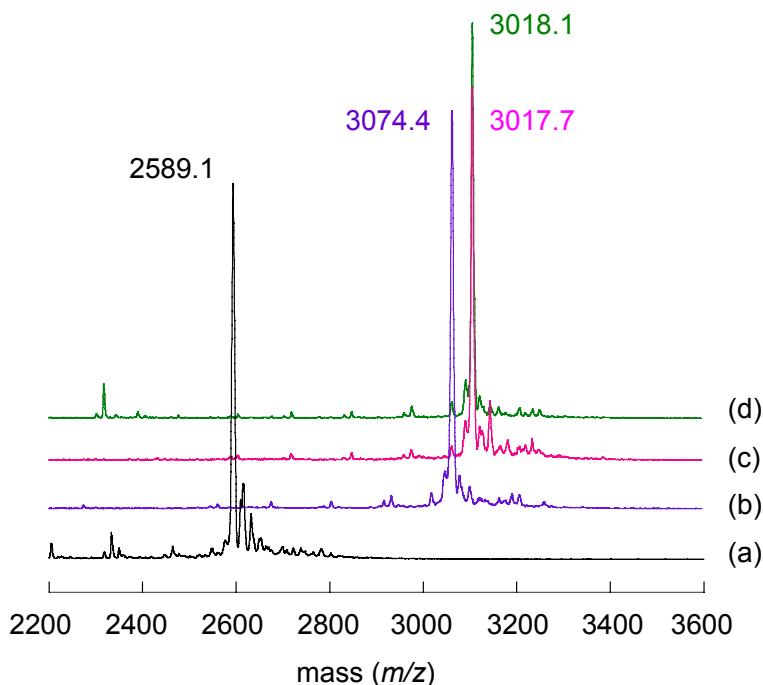
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MALDI-TOF mass spectra and CD spectra of all the peptides are described in this supporting information.

< MALDI-TOF mass spectra >

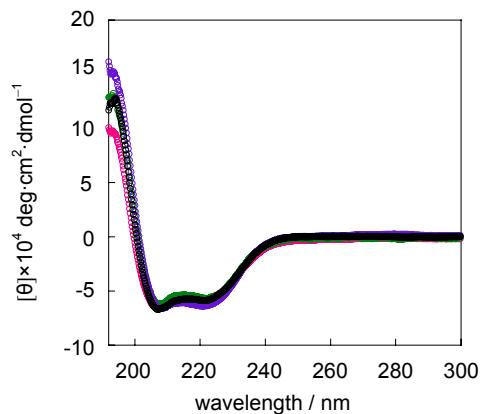
MALDI-TOF mass spectra were recorded by using Applied Biosystem Voyager-DE<sup>TM</sup> PRO with  $\alpha$ -cyano-4-hydroxycinnamic acid (CHCA) as a matrix.



**Fig. S1** MALDI-TOF mass spectra of (a) model peptide, (b)BRos-pep, (c)BRho-pep-1, and (d) BRho-pep-2.

<CD spectra of peptides>

CD spectra of the labeled peptides were obtained by JASCO J-715 spectropolarimeter in a condition of 25  $\mu$ M peptide solution in MilliQ at 20°C with 1 mm cell and sweeping rate of 20 nm/min.



**Fig. S2** CD spectra of C8C15 (black), BRos-pep(blue), BRho-pep1(blue), and BRho-pep2 (pink),.