

Supporting Information

β -Turn Sequences Promote Stability of Peptide Substrates for Kinases within the Cytosolic Environment

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Supplementary Figures

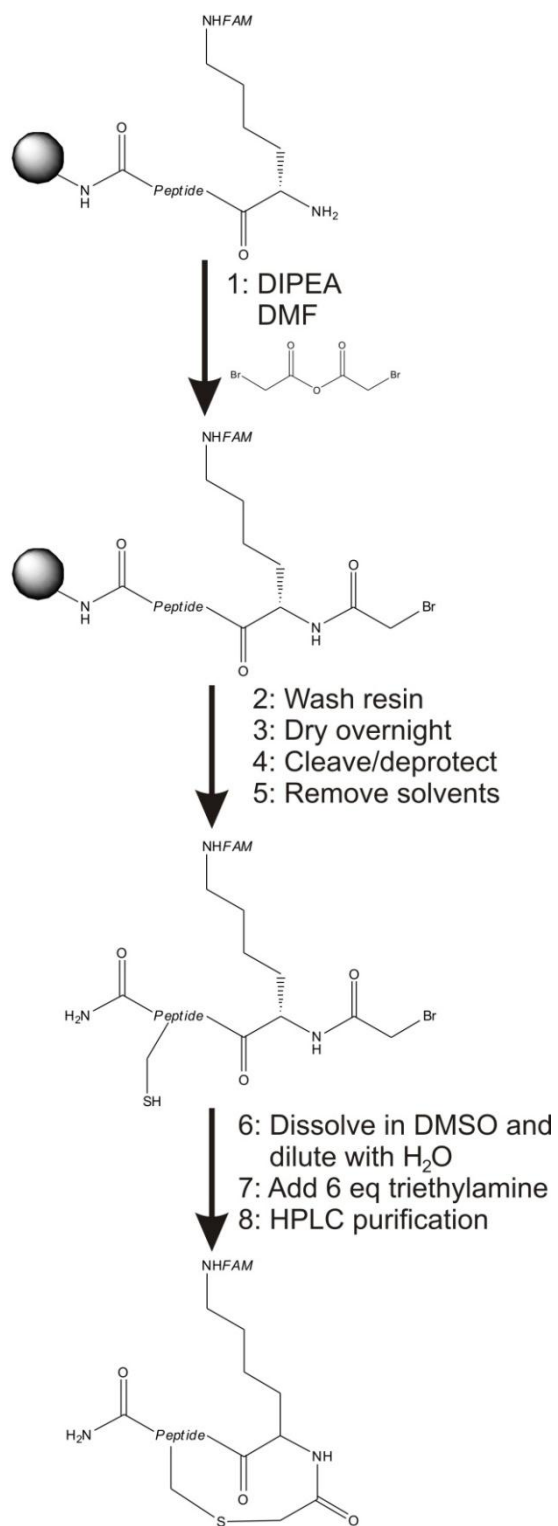


Figure S1: Scheme of bromoacetylation for crosslinking peptides **4** and **5**.

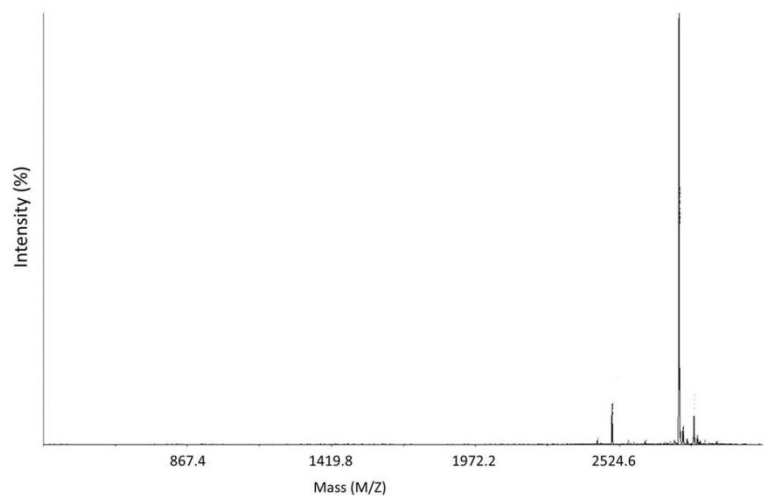


Figure S2: MALDI-MS of peptide **2**.

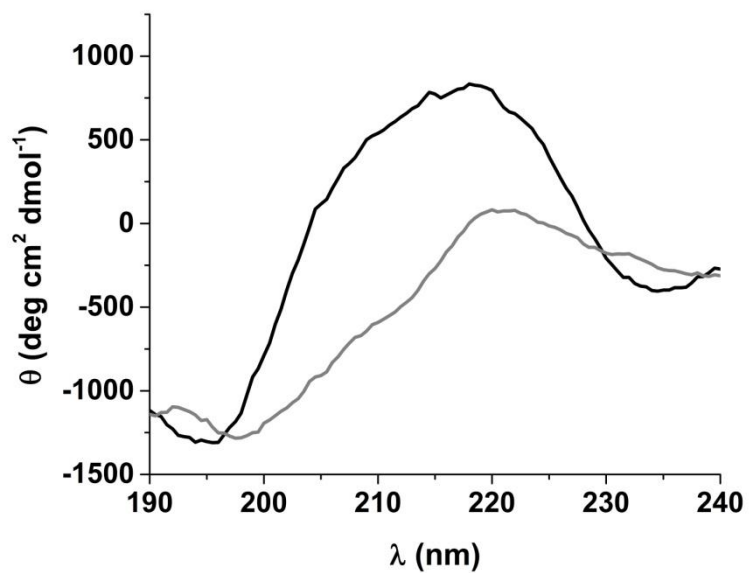


Figure S3: Circular dichroism spectra of peptides **2** (black) and **3** (gray) at a peptide concentration of 20 μM in deionized water (pH 7.38) at 25 $^{\circ}\text{C}$.

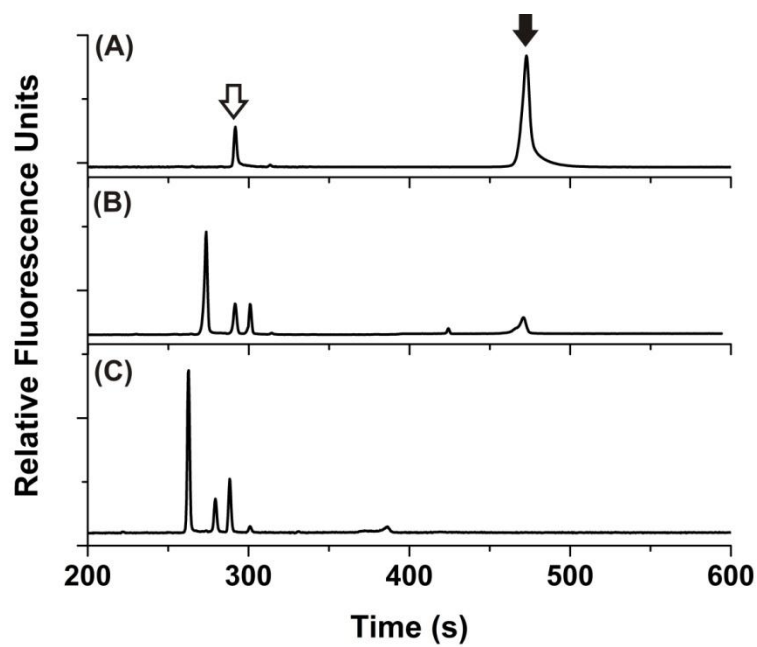


Figure S4: Electropherograms of peptide **1** after incubation in a Baf/BCR-ABL cytosolic lysate for 0 (A), 3 (B), or 5 (C) min. The open arrow indicates an internal standard and the solid arrow indicates intact peptide **1**.

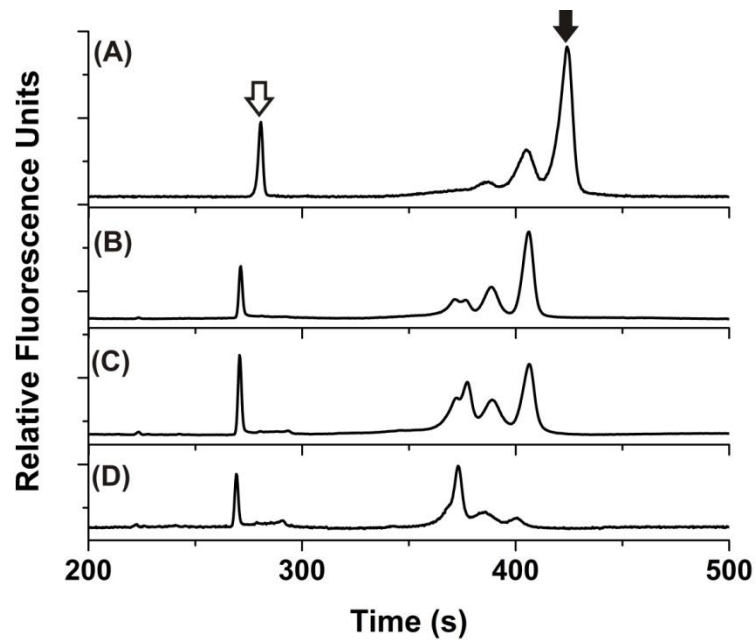


Figure S5: Electropherograms of peptide **5** after incubation in a Baf/BCR-ABL cytosolic lysate for 0 (A), 15 (B), 20 (C), or 40 (D) min. The open arrow indicates an internal standard and the solid arrow indicates intact peptide **5**.

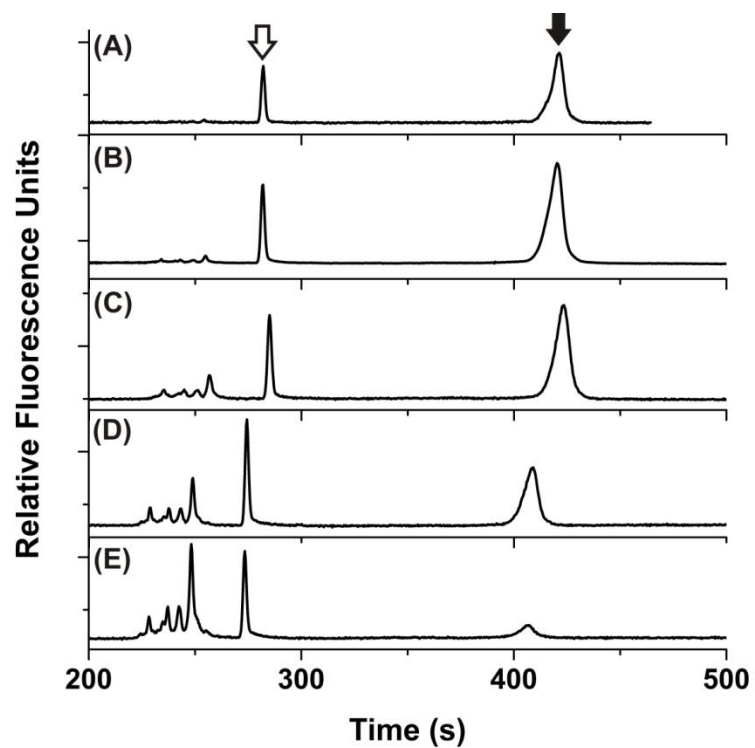


Figure S6: Electropherograms of peptide **6-FlAsH** after incubation in a Baf/BCR-ABL cytosolic lysate for 0 (A), 5 (B), 20 (C), 30 (D), or 50 (E) min. The open arrow indicates an internal standard and the solid arrow indicates intact peptide **6-FlAsH**.

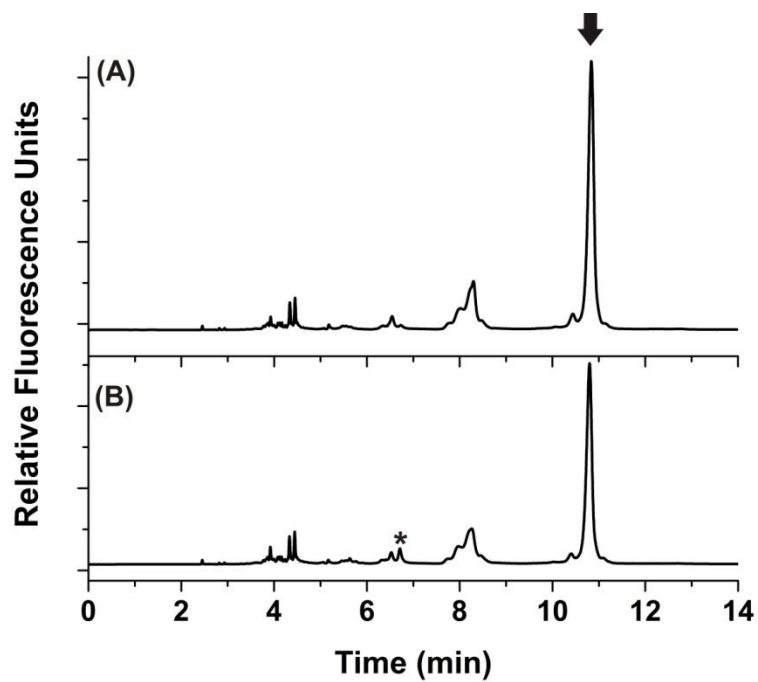


Figure S7: Electropherograms of peptide **5** after a 10 min incubation with ATP in a Baf/BCR-ABL cytosolic lysate with (A) and without (B) the inhibitor Gleevec. The solid arrow indicates intact peptide **5** and the asterisk represents phosphorylated peptide **5**.

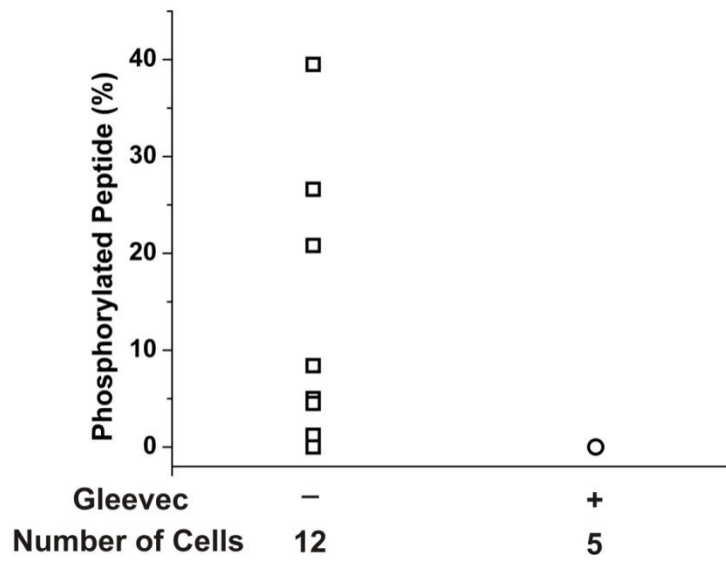


Figure S8: Percent phosphorylation of peptide **5** in single Baf/BCR-ABL cells with (open circles) and without (open squares) pre-treatment with Gleevec. Percent phosphorylated peptide is calculated for undegraded peptide only.

Peptide	Calculated MW (Da)	Measured MW (Da)
1	1691.5	1692.3
2	2723.3	2723.4
3	2981.5	2981.4
4	2866.4	2867.3
5	3123.5	3124.2

Table S1: The calculated and MALDI-MS detected molecular weights (MW) for the peptides.