Electronic Supplementary Material (ESI) for New Journal of Chemistry.

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Peptide probes with high affinity to target protein selection by phage display and characterization using biophysical approaches

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Table S1: Analogue peptide sequences.

Peptide	Sequence
DHFR-Y1	NH ₂ -Trp-Ser-Leu-Gly-Tyr-Thr-Gly-Ac
DHFR-Yn	Flu-βA-Trp-Ser-Leu-Gly-Tyr-Thr-Gly-Ac
DHFR-Yc	NH ₂ -Trp-Ser-Leu-Gly-Tyr-Thr-Lys (Flu)-Ac

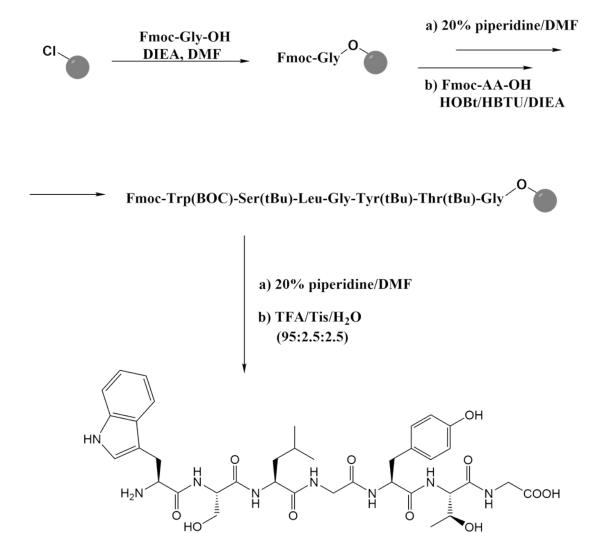


Figure S1: General strategy for the solid-phase synthesis of DHFR-Y1.

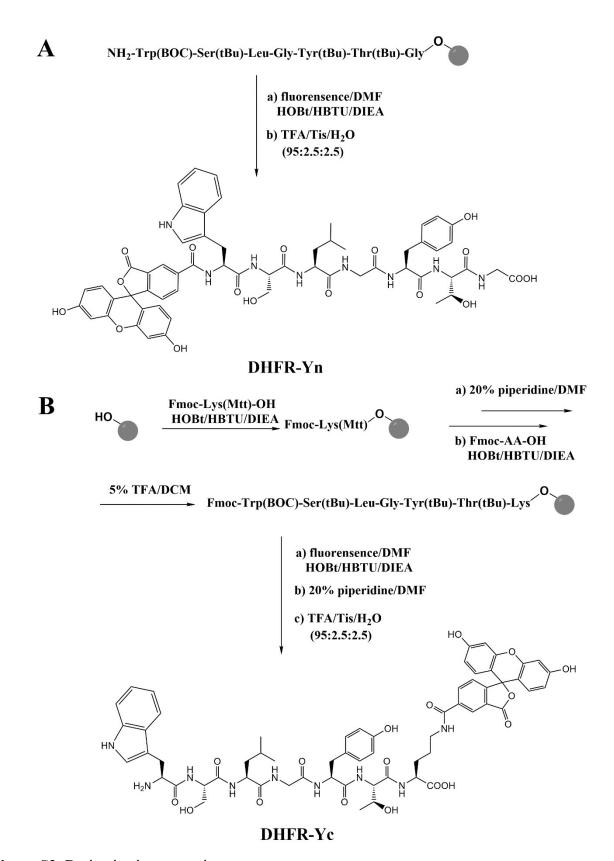


Figure S2. Derivatization strategies.

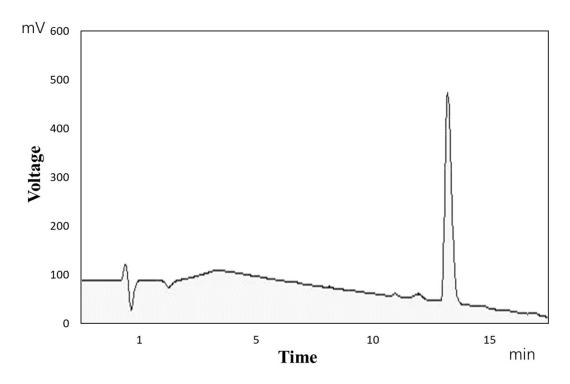


Figure S3: HPLC spectrum of DHFR-Y1.

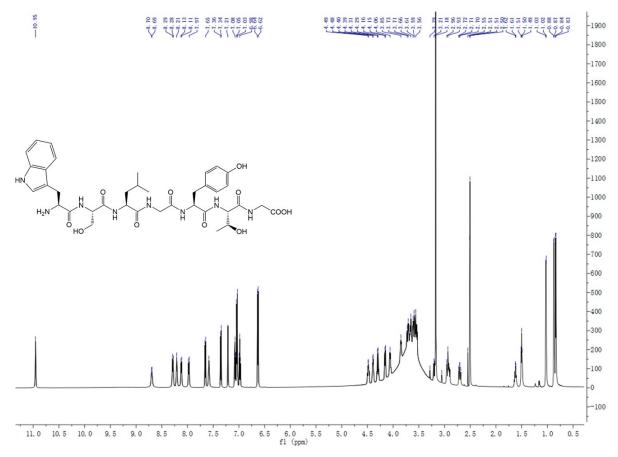


Figure S4: 1D ¹H NMR spectra of DHFR-Y1 in DMSO-d6.

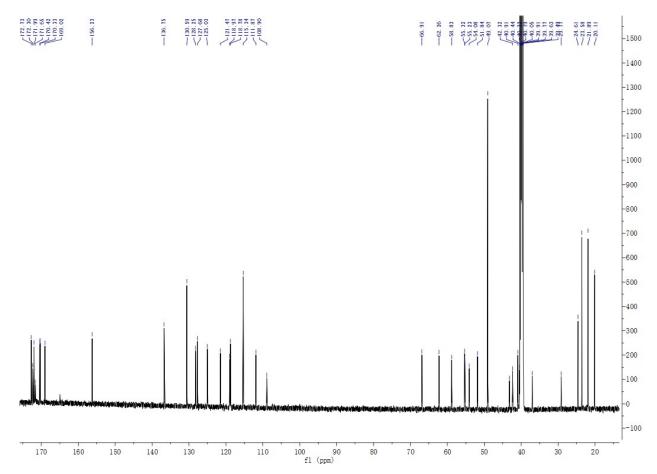


Figure S5: 1D 13 C NMR spectrum of DHFR-Y1 in DMSO-d6.

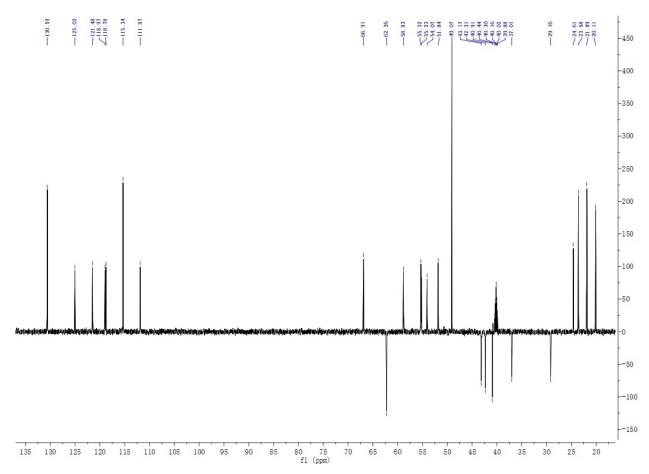


Figure S6: 1D DEPT 135 spectrum of DHFR-Y1 in DMSO-d6.

T: FTMS + p ESI Full ms [150.0000-800.0000]

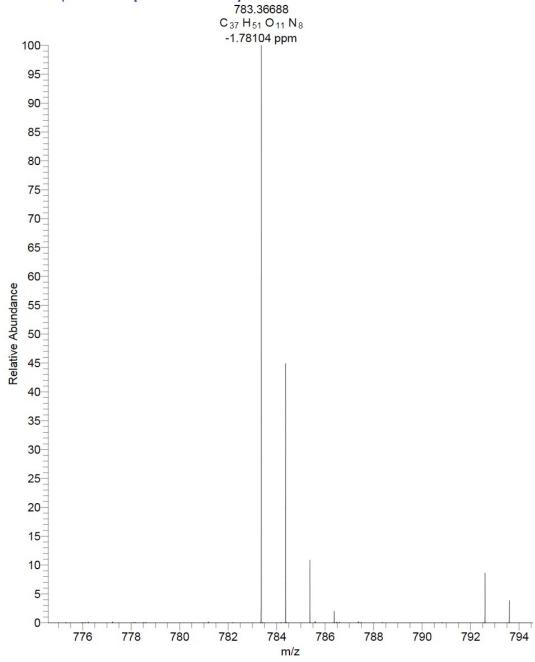


Figure S7: Mass spectrum of DHFR-Y1.

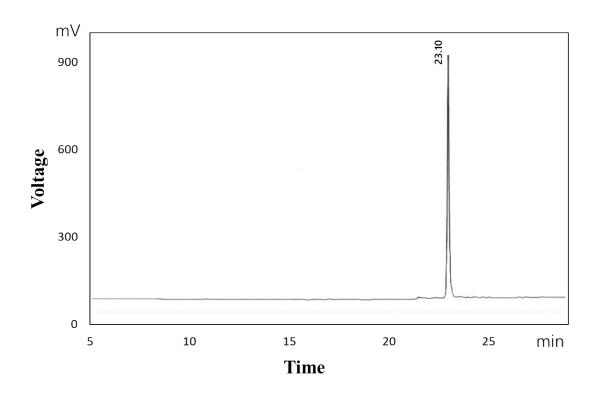


Figure S8: HPLC spectrum of DHFR-Yn.

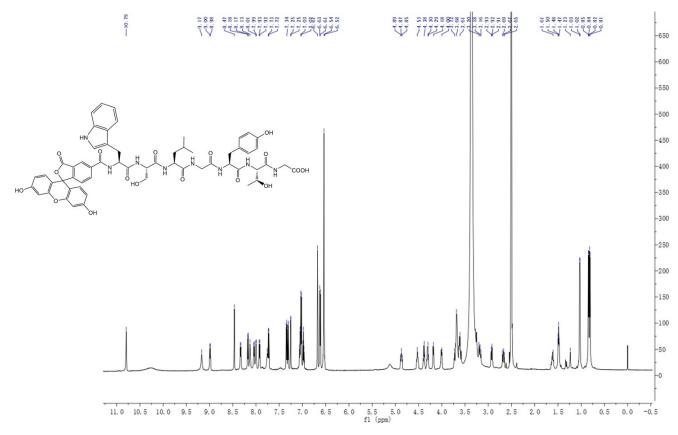


Figure S9: 1D ¹H NMR spectrum of DHFR-Yn in DMSO-d6

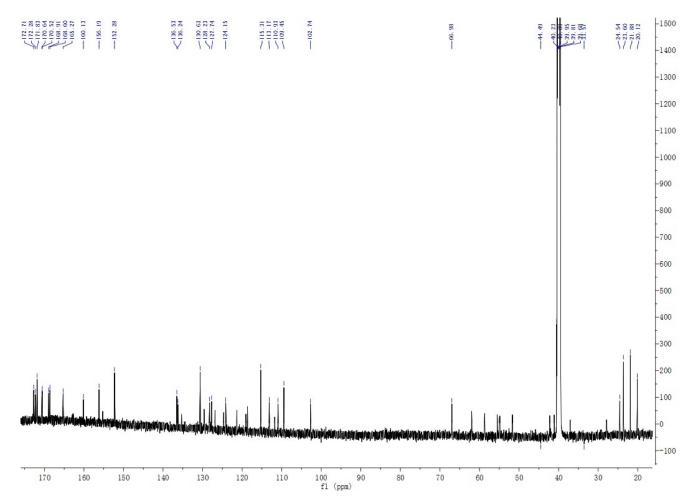


Figure S10: 1D ¹³C NMR spectrum of DHFR-Yn in DMSO-d6

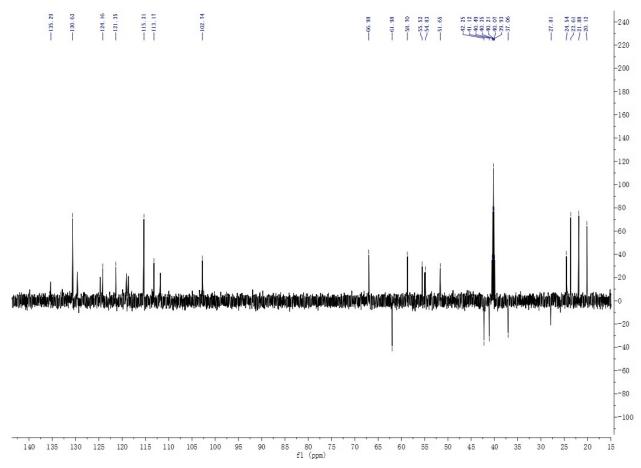


Figure S11: 1D DEPT 135 spectrum of DHFR-Yn in DMSO-d6.

T: FTMS + p ESI Full ms [900.0000-1400.0000]

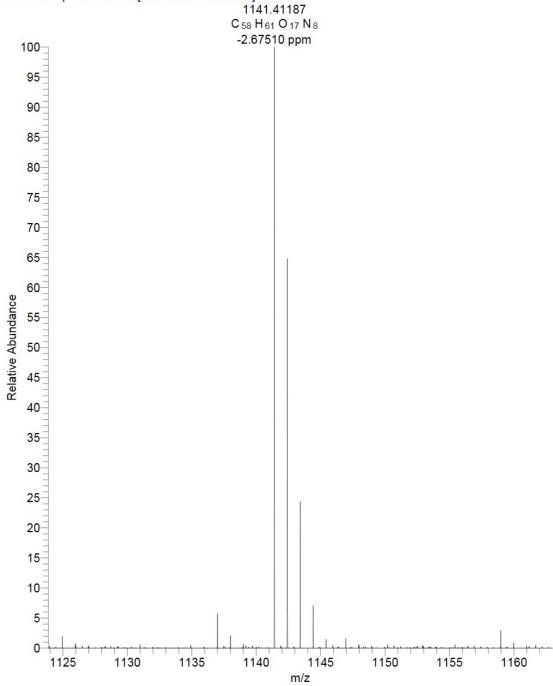


Figure S12: Mass spectrum of DHFR-Yn.

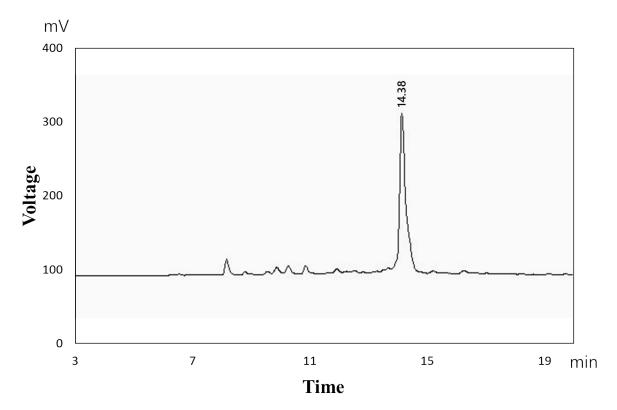


Figure S13: HPLC spectrum of DHFR-Yc.

T: FTMS + p ESI Full ms [1000.0000-1400.0000]

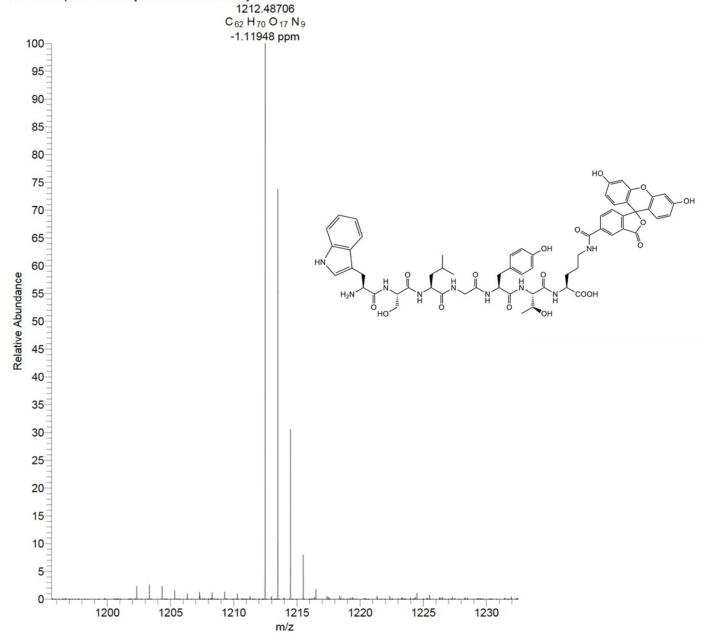


Figure S14: Mass spectrum of DHFR-Yc.

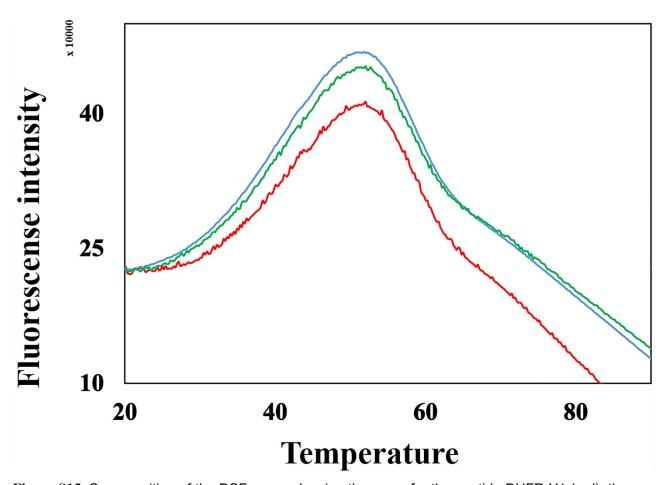


Figure S15: Superposition of the DSF assay showing the curve for the peptide DHFR-Y1 (red), the apo enzyme (blue) and the unrelated peptide (green, control).