

Supplementary Information for

Engineering peptide inhibitors of the HFE-Transferrin Receptor 1 Complex

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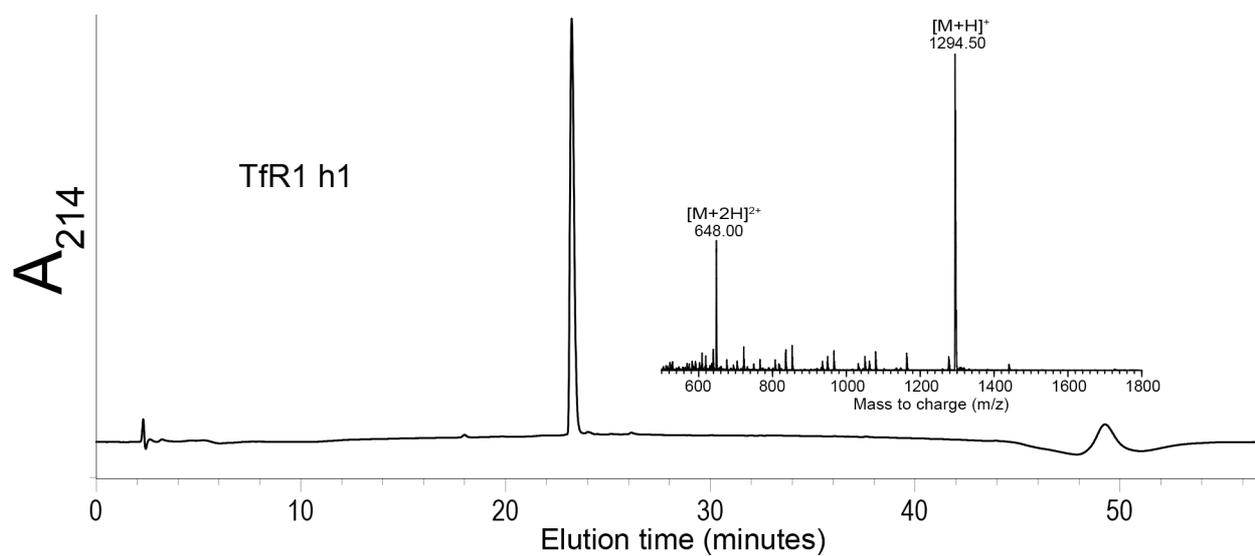


Figure S1. Analytical HPLC trace of TfR1 h1 with attached ESI-MS spectra. Analytical HPLC was run at an increasing gradient of 2% buffer B (90% ACN, 0.05% TFA) in buffer A (0.05% TFA) per minute using an Agilent, 300Å, 5 μ m, 150 x 2.1 mm C18 column.

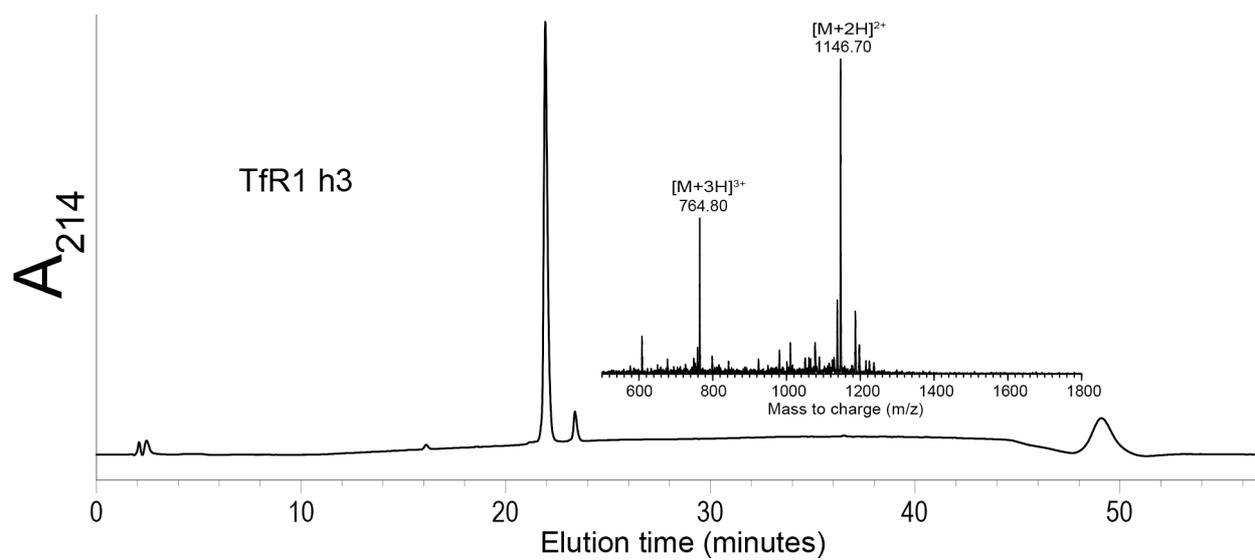


Figure S2. Analytical HPLC trace of TfR1 h3 with attached ESI-MS spectra. Analytical HPLC was run at an increasing gradient of 2% buffer B (90% ACN, 0.05% TFA) in buffer A (0.05% TFA) per minute using an Agilent, 300Å, 5 μ m, 150 x 2.1 mm C18 column.

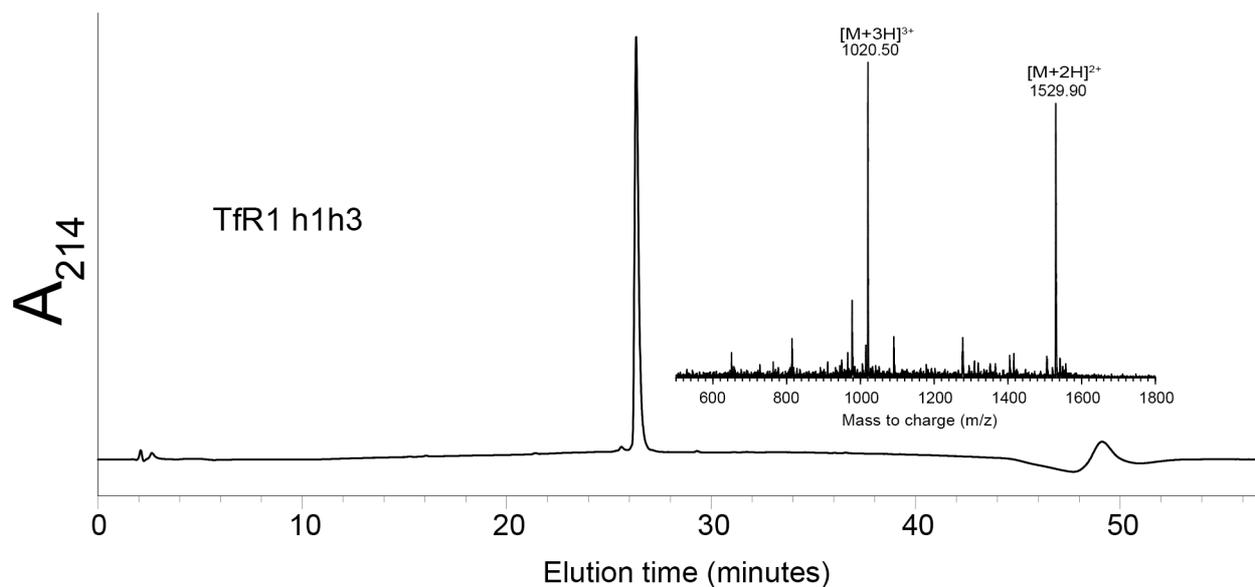


Figure S3. Analytical HPLC trace of TfR1 h1h3 with attached ESI-MS spectra. Analytical HPLC was run at an increasing gradient of 2% buffer B (90% ACN, 0.05% TFA) in buffer A (0.05% TFA) per minute using an Agilent, 300Å, 5 μ m, 150 x 2.1 mm C18 column.

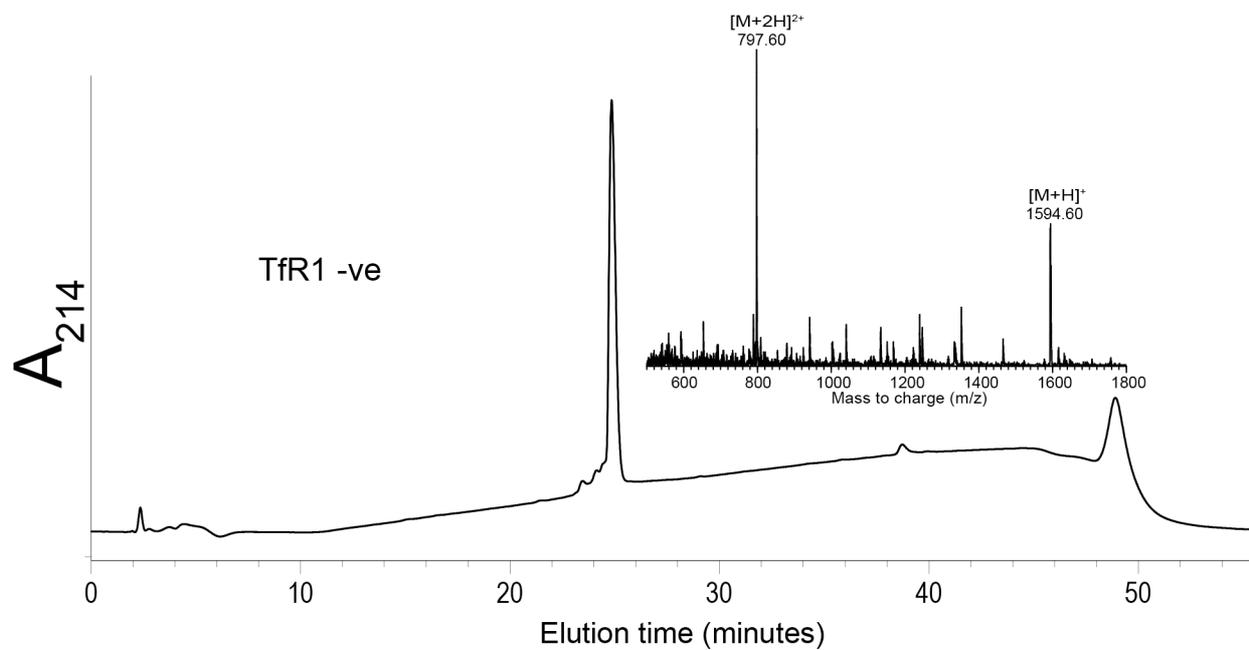


Figure S4. Analytical HPLC trace of TfR1 negative control with attached ESI-MS spectra. Analytical HPLC was run at an increasing gradient of 2% buffer B (90% ACN, 0.05% TFA) in buffer A (0.05% TFA) per minute using an Agilent, 300Å, 5 μ m, 150 x 2.1 mm C18 column.

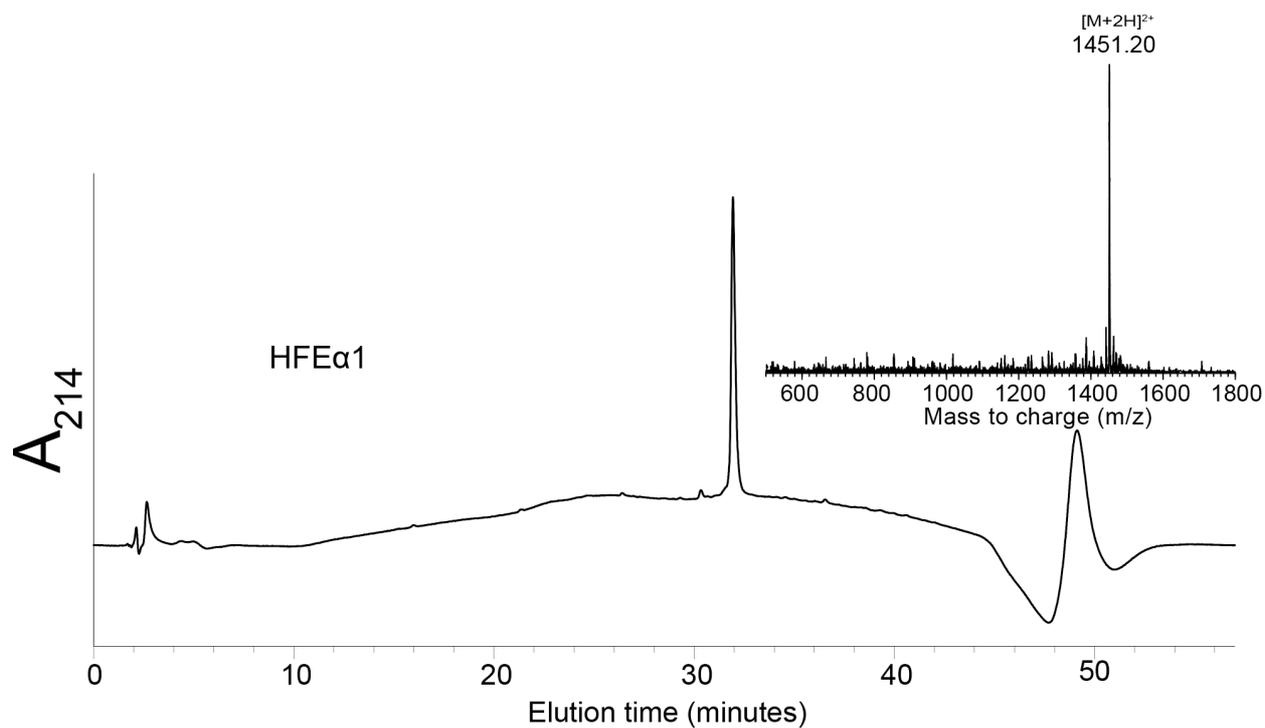


Figure S5. Analytical HPLC trace of HFE α 1 with attached ESI-MS spectra. Analytical HPLC was run at an increasing gradient of 2% buffer B (90% ACN, 0.05% TFA) in buffer A (0.05% TFA) per minute using an Agilent, 300 \AA , 5 μm , 150 x 2.1 mm C18 column.

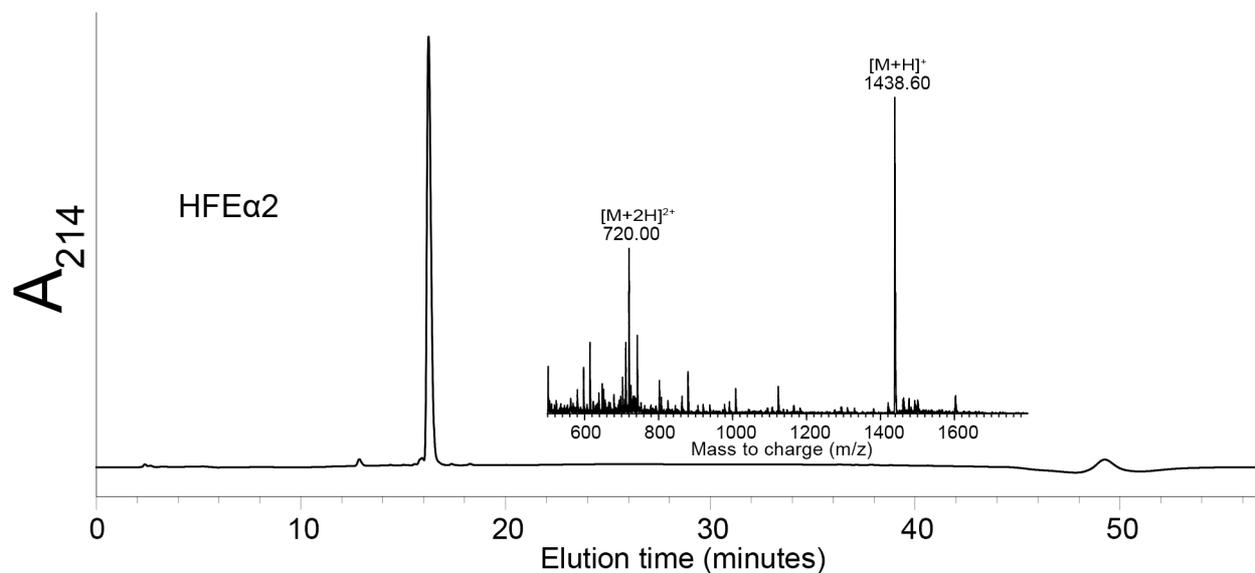


Figure S6. Analytical HPLC trace of HFE α 2 with attached ESI-MS spectra. Analytical HPLC was run at an increasing gradient of 2% buffer B (90% ACN, 0.05% TFA) in buffer A (0.05% TFA) per minute using an Agilent, 300Å, 5 μ m, 150 x 2.1 mm C18 column.

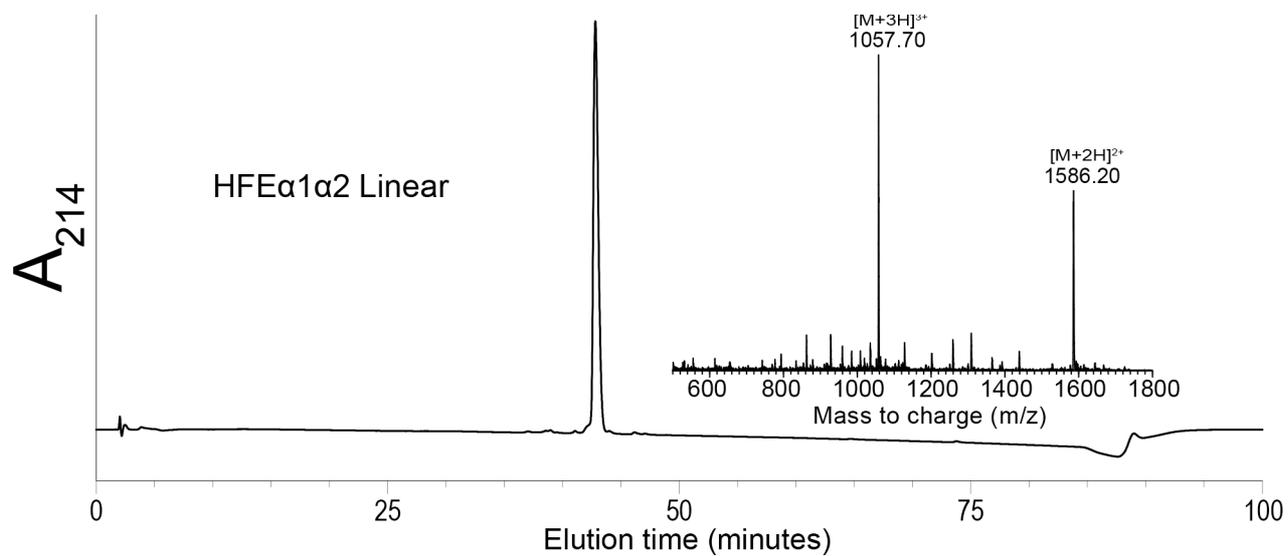


Figure S7. Analytical HPLC trace of HFE $\alpha 1\alpha 2$ with attached ESI-MS spectra. Analytical HPLC was run at an increasing gradient of 1% buffer B (90% ACN, 0.05% TFA) in buffer A (0.05% TFA) per minute using an Agilent, 300Å, 5 μ m, 150 x 2.1 mm C18 column.

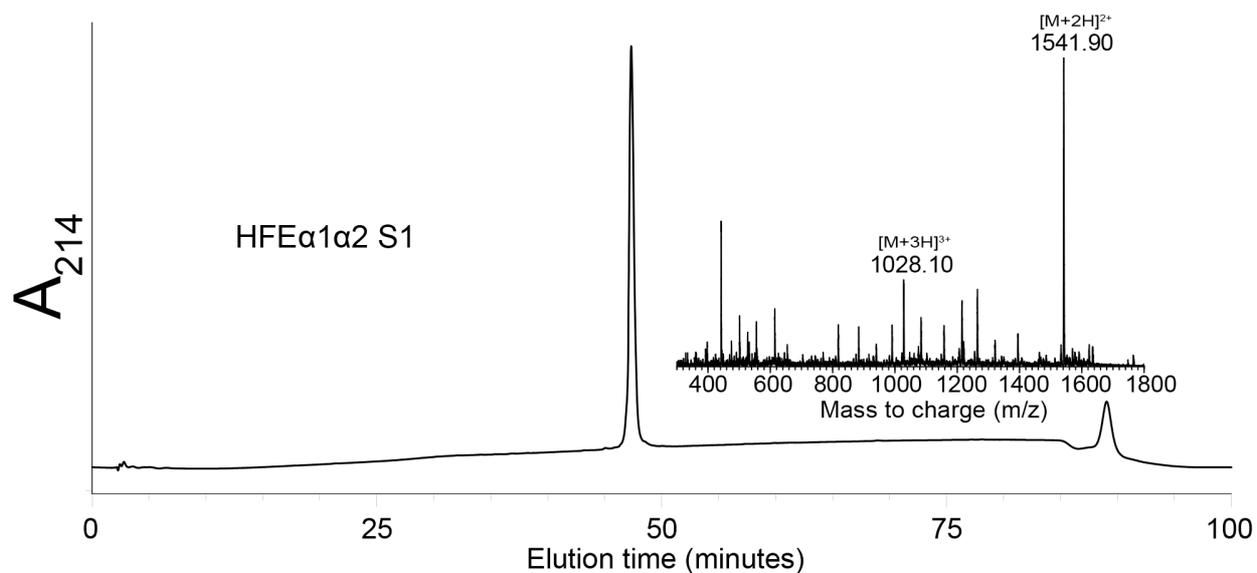


Figure S8. Analytical HPLC trace of HFE $\alpha 1\alpha 2$ staple 1 with attached ESI-MS spectra. Analytical HPLC was run at an increasing gradient of 1% buffer B (90% ACN, 0.05% TFA) in buffer A (0.05% TFA) per minute using an Agilent, 300Å, 5 μ m, 150 x 2.1 mm C18 column.

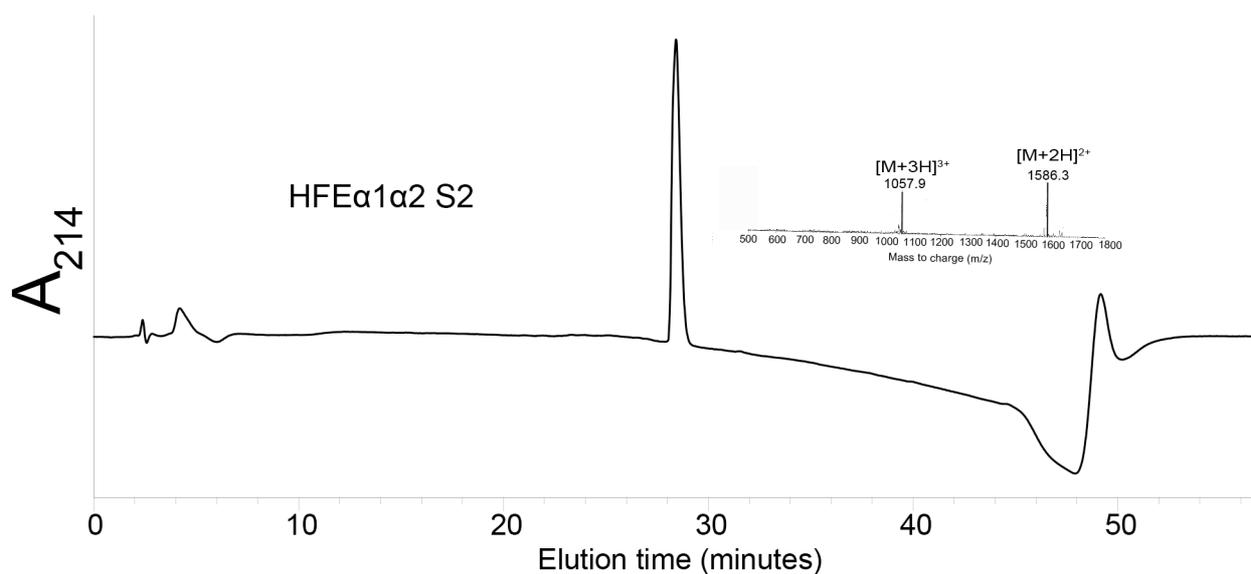


Figure S9. Analytical HPLC trace of HFE α 1 α 2 staple 2 with attached ESI-MS spectra. Analytical HPLC was run at an increasing gradient of 2% buffer B (90% ACN, 0.05% TFA) in buffer A (0.05% TFA) per minute using an Agilent, 300Å, 5 μ m, 150 x 2.1 mm C18 column.

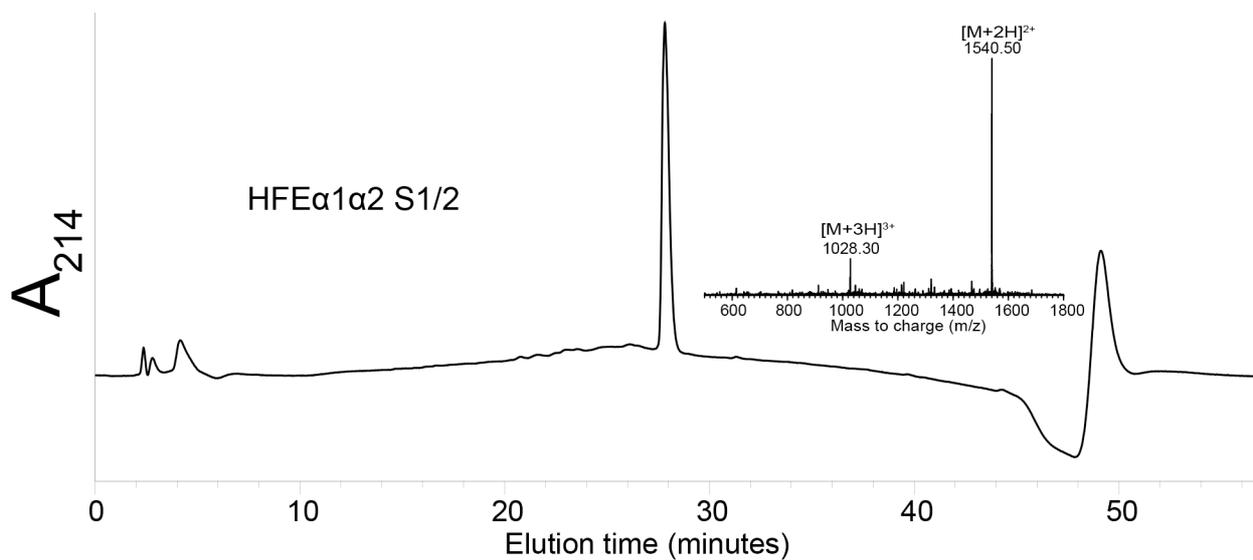


Figure S10. Analytical HPLC trace of HFE $\alpha 1\alpha 2$ double staple with attached ESI-MS spectra. Analytical HPLC was run at an increasing gradient of 2% buffer B (90% ACN, 0.05% TFA) in buffer A (0.05% TFA) per minute using an Agilent, 300Å, 5 μ m, 150 x 2.1 mm C18 column.

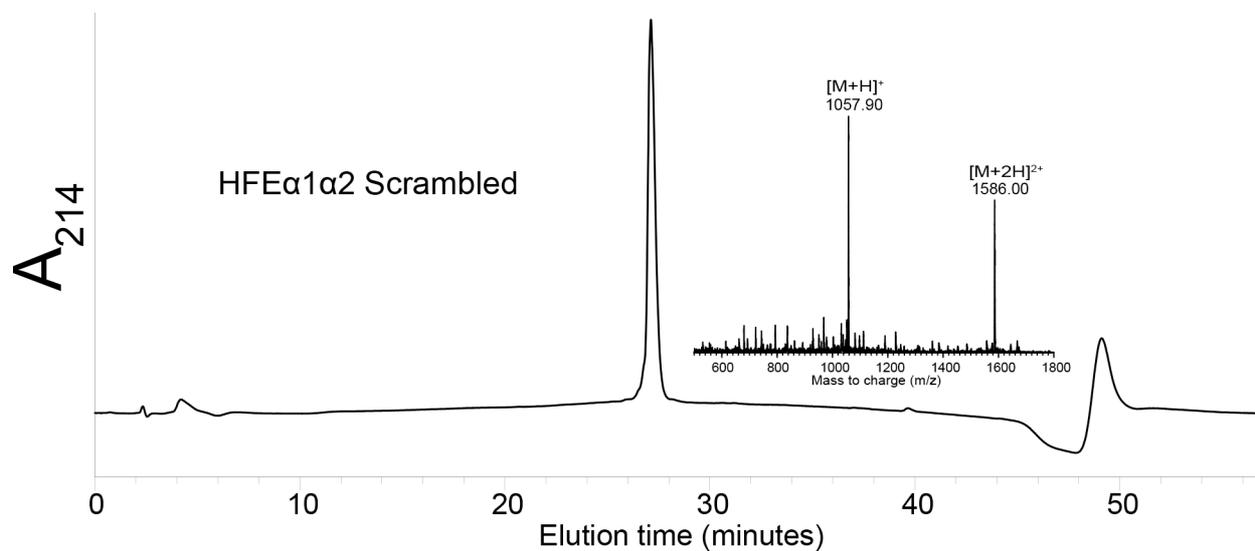


Figure S11. Analytical HPLC trace of HFE α 1 α 2 scrambled sequence with attached ESI-MS spectra. Analytical HPLC was run at an increasing gradient of 2% buffer B (90% ACN, 0.05% TFA) in buffer A (0.05% TFA) per minute using an Agilent, 300Å, 5 μ m, 150 x 2.1 mm C18 column.

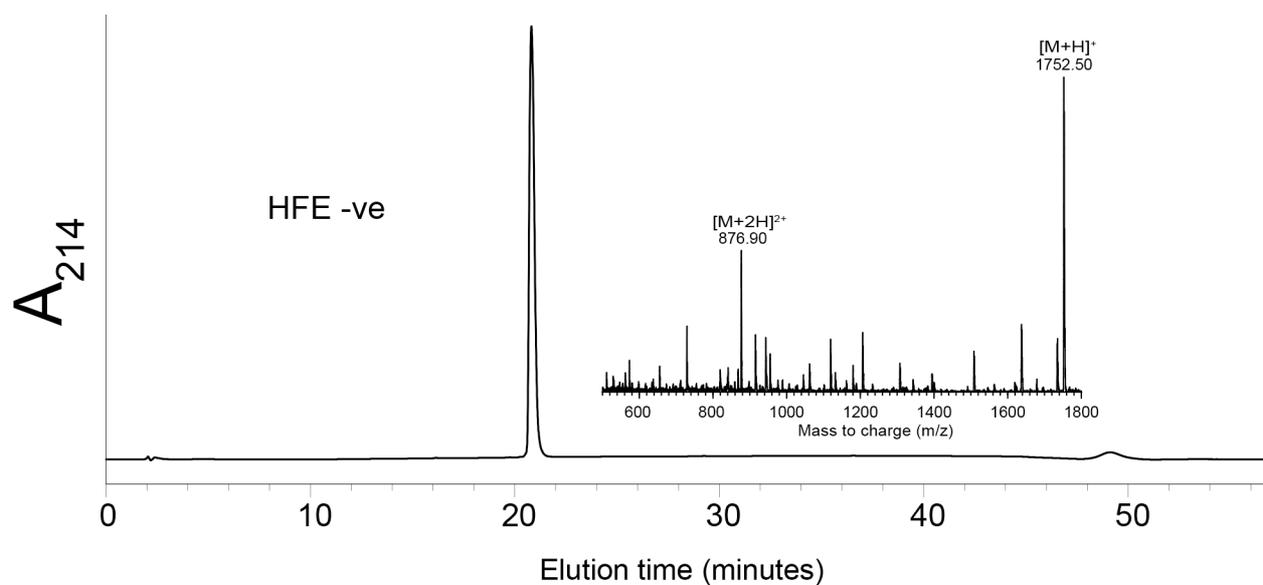


Figure S12. Analytical HPLC trace of HFE negative control with attached ESI-MS spectra. Analytical HPLC was run at an increasing gradient of 2% buffer B (90% ACN, 0.05% TFA) in buffer A (0.05% TFA) per minute using an Agilent, 300Å, 5 μ m, 150 x 2.1 mm C18 column.