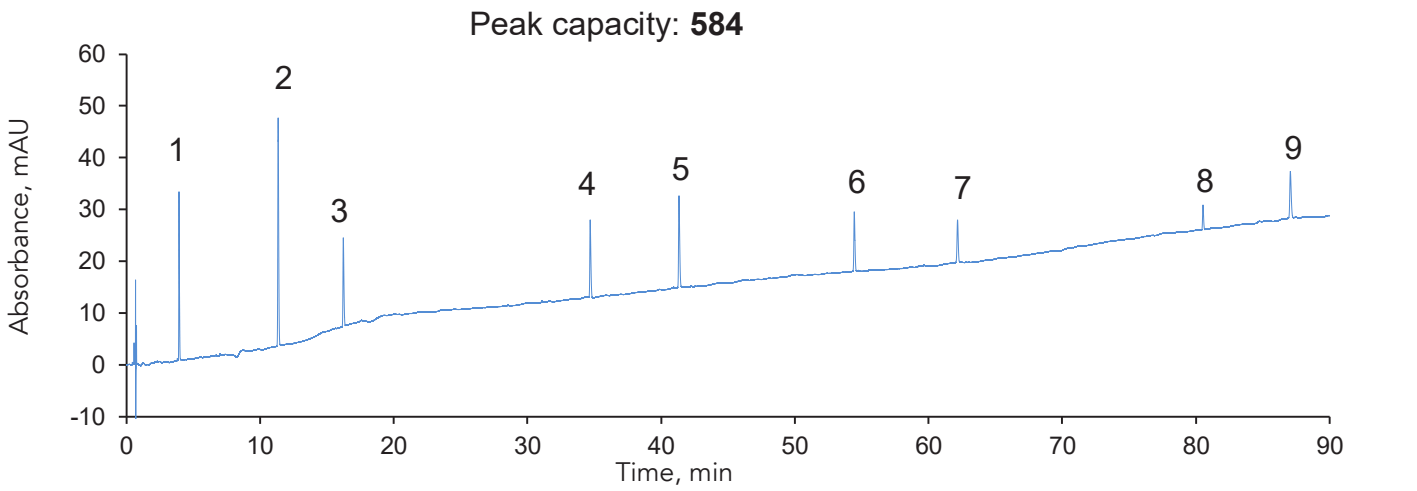
HALO®

BIOPHARMACEUTICALS

Very High Peak Capacity with HALO 160 Å ES-C18, 2.0 µm

Application Note 136-PE



With a HALO® 2.0 µm 160 Å ES-C18 column, very high peak capacity values can be obtained within 90 minutes. The sharp, narrow peaks facilitate separations of complex, challenging samples, such as tryptic digests.

TEST CONDITIONS:

Column: HALO 160 Å ES-C18, 2.0 µm, 2.1 x 150 mm
Part Number: 91122-702
Mobile Phase:
A: 0.1% Trifluoroacetic acid in water
B: 0.1% Trifluoroacetic acid in 80/20 acetonitrile/water
Gradient: 5% B to 50% B in 90 min
Flow Rate: 0.5 mL/min
Max. Pressure: 577 bar
Temperature: 60 °C
Detection: UV 215 nm, PDA
Injection Volume: 0.5 µL
Sample Solvent: Mobile phase A
Response Time: 0.025 sec
Data Rate: 40 Hz
Flow Cell: 1.0 µL
LC System: Shimadzu Nexera X2

PEAK IDENTITIES:

	MW (g/mol):
1. Asp-Phe	280
2. Tyr-Tyr-Tyr	508
3. Angiotensin (1-7) amide	898
4. Angiotensin II	1046
5. Angiotensin (1-12) human	1509
6. Neurotensin	1673
7. ß-endorphin	3465
8. Sauvagine	4599
9. Mellitin	2847

Peak Capacity: $n_{pc} = \frac{(t_f - t_i)}{W_{4\sigma}}$

where t_i is the time for initial measurable peak in the gradient, t_f is the time for final peak and $W_{4\sigma}$ is the average four-sigma width in time for the peaks in the chromatogram