Application Report 191

Analysis of Serum-derived Peptide Probes Using Ascentis™ RP-Amide

These naturally occurring peptide sequences vary in their number of positive charges at low pH from +2 to +4, and exhibit excellent peak shape on Ascentis RP-Amide even in the absence of ion-pairing reagents.

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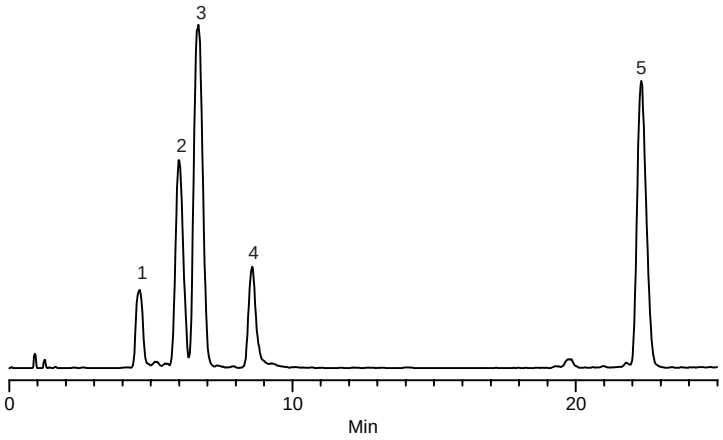
Acquisition System: Micro-Tech Scientific UltraPlus II / Thermo LCQ Advantage

Notebook Reference: 1524

Key Words

serum peptides, cationic peptides, LC-MS, Ascentis RP-Amide, 565304-U



G002689

Conditions

column:	Ascentis RP-Amide, 10 cm x 2.1 mm I.D., 5 µm particles (565304-U)
mobile phase A:	50:50, 50 mM formic acid titrated with ammonium hydroxide (pH 3.0):water
mobile phase B:	50:50, 50 mM formic acid titrated with ammonium hydroxide (pH 3.0):acetonitrile
flow rate:	0.2 mL/min.
temp.:	ambient
det.:	ESI (+)
injection:	4 µL
sample:	as indicated in 10 mM formic acid

gradient:	Min	%A	%B
	0	70	30
	25	45	55

Peak IDs

1. Peptide 1, $(M+H)^+$ = 1142.0, $(M+2H)^{2+}$ = 572.6; (10 mg/L)
2. Peptide 2, $(M+2H)^{2+}$ = 810.0; (10 mg/L)
3. Peptide 3, $(M+2H)^{2+}$ = 649.5; (10 mg/L)
4. Peptide 4, $(M+2H)^{2+}$ = 885.5; (10 mg/L)
5. Peptide 5, $(M+2H)^{2+}$ = 977.8, $(M+3H)^{3+}$ = 652.6; (10 mg/L)

Structures

Peptide 1 - G002690

HINIDQFVR

Peptide 2 - G002691

TEVSSNHVLIYLDK

Peptide 3 - G002692

DRVYIHPFHL

Peptide 4 - G002693

DNENVVNEYSSELEK

Peptide 5 - G002694

FTVDRPFLFLIYEHR