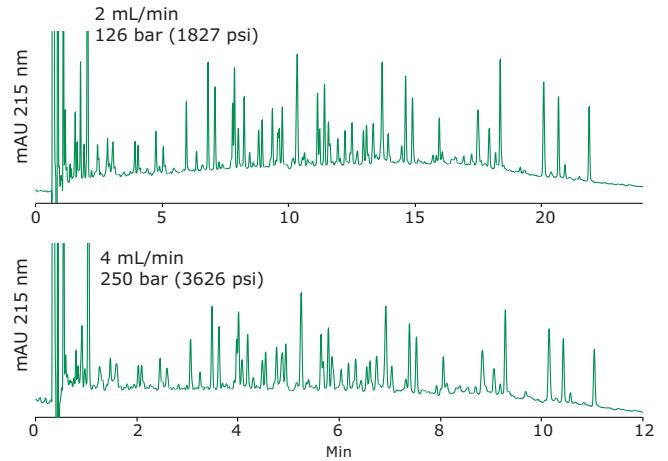


### Rapid Tryptic Digest Analysis Using BIOshell™ A160 Peptide C18

<b>column:</b>	BIOshell™ A160 Peptide C18, 15 cm x 4.6 mm I.D., 5.0 µm
<b>mobile phase:</b>	[A] Water (0.1% TFA); [B] Acetonitrile (0.1% TFA)
<b>gradient:</b>	As indicated
<b>flow rate:</b>	As indicated
<b>column temp.:</b>	60 °C
<b>detector:</b>	UV, 215 nm
<b>injection:</b>	15 µL
<b>sample:</b>	Tryptic digest, 1 mg/mL, water (0.1% TFA)

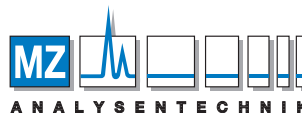
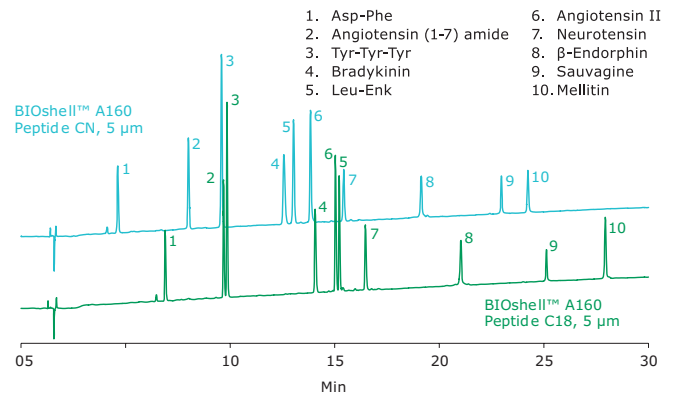
BIOshell™ A160 Peptide columns can more than double sample throughput by allowing the analyst to operate at higher flow rates without a concomitant drop in efficiency.



### Different Phase Chemistries Allows for Alternative Selectivity for Peptides

<b>Columns</b>	As indicated, 15 cm x 4.6 mm I.D., 5.0 µm
<b>Mobile phase</b>	[A] Water (0.1% TFA); [B] Acetonitrile (0.1% TFA)
<b>Gradient</b>	5% B to 50% B in 30 min
<b>Flow rate</b>	1.0 mL/min
<b>Temp.</b>	40°C
<b>Detector</b>	UV, 215 nm
<b>Injection vol</b>	10 µL
<b>Sample</b>	Proteins, 10 µg/mL, water (0.1% TFA)

Using phase chemistries that interact with peptides using unique retention mechanisms can lead to different selectivity.



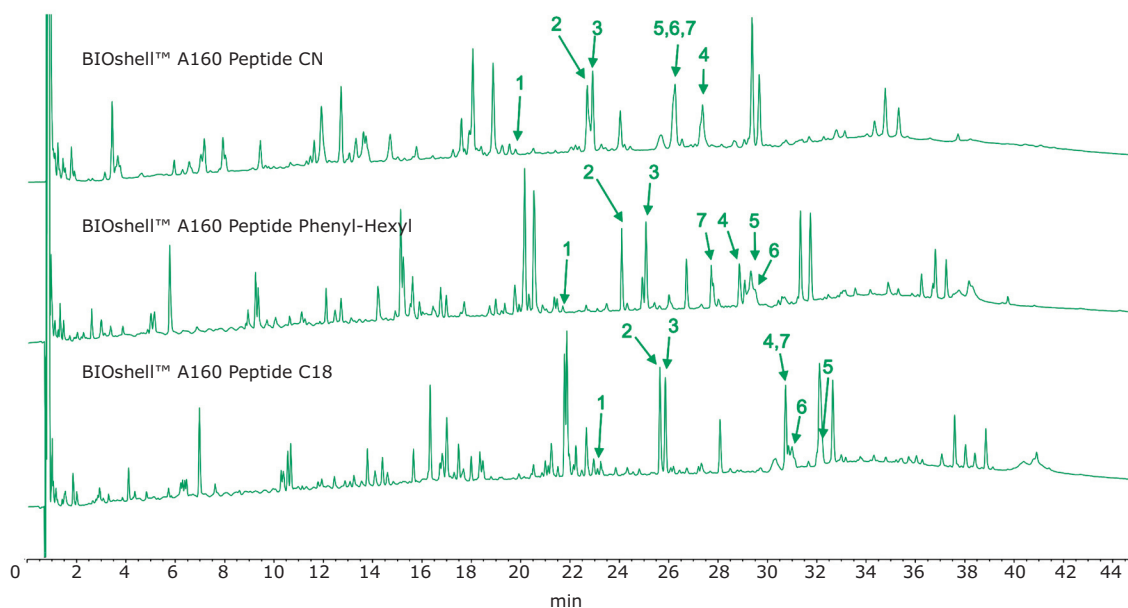
#### AUTHORIZED DISTRIBUTOR

MZ-Analysentechnik GmbH, Barcelona-Allee 17 • D-55129 Mainz  
Tel +49 6131 880 96-0, Fax +49 6131 880 96-20  
e-mail: info@mz-at.de, www.mz-at.de

## Different Phase Chemistries Allows for Alternative Selectivity for Peptides

### Compound (amino acid sequence)

- |                           |                              |
|---------------------------|------------------------------|
| 1. FTISADTSKNTAYLQMNSLR   | 5. SGTASVVCLLNIFYPR          |
| 2. LSCAASGFNIKDTYIHWVR    | 6. SCDKTHTCPPELGGPSVFLFPPKPK |
| 3. GFYPSDIAVEWESNGQPENNYK | 7. VVSVLTVLHQDWLNGKEYK       |
| 4. LLIYSASFLYSGVPSR       |                              |



**column:** BIOshell™ A160 Peptide CN, 10 cm x 2.1 mm I.D., 2.7 µm;  
 BIOshell™ A160 Peptide Phenyl-Hexyl, 10 cm x 2.1 mm I.D., 2.7 µm;  
 BIOshell™ A160 Peptide C18, 10 cm x 2.1 mm I.D., 2.7 µm

**mobile phase:** [A] 10 mM Difluoroacetic acid in water  
 [B] 10 mM Difluoroacetic acid in acetonitrile

**gradient:** 2% B to 50% B in 60 min

**flow rate:** 0.3 mL/min

**column temp.:** 60 °C

**detector:** MSD, ESI-(+3.5 kV)

**injection:** 5 µL of 0.2 mg/mL digest

**sample:** Tryptic peptides, varied concentration, in 50 mM Tris-HCl/1.5 M Guanidine-HCl with 0.25% formic acid

Better sequence coverage, through better resolution of critical pairs, can be achieved by using phase chemistries orthogonal to C18.