

# THE SHARPEST TOOL FOR THE SHARPEST PEAKS



Discover the Advantages of the HALO 2 Peptide UHPLC Column

# HALO<sup>®</sup> 2 PEPTIDE

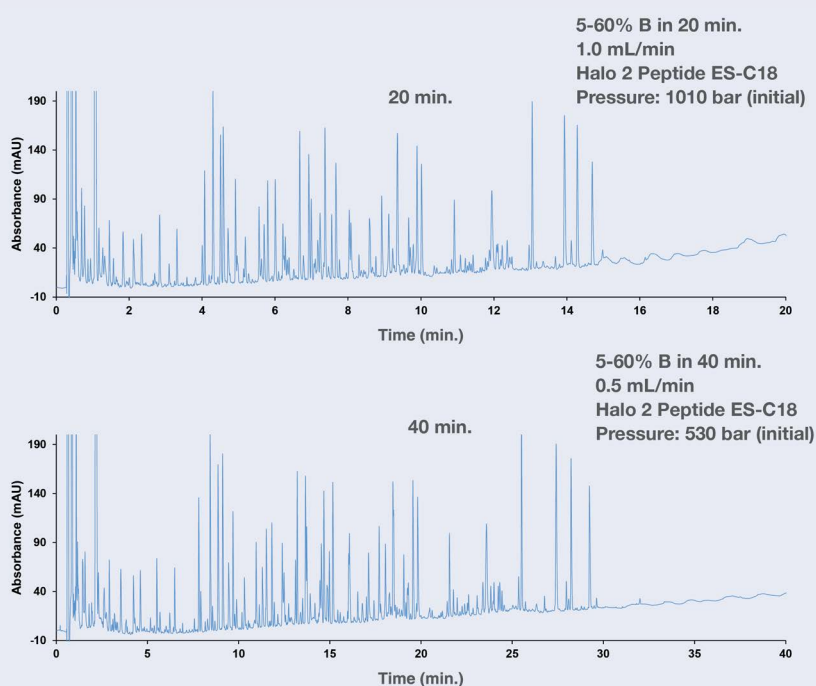
## SHARPEN YOUR PERFORMANCE

### INTRODUCING THE NEW HALO 2 PEPTIDE COLUMN

- Fast, high efficiency separations for maximum resolution (Figure A)
- Higher peak capacity of UHPLC analyses at lower back pressures (Figure B)
- Improved productivity with high, fast resolution (Figure C)

#### EFFICIENT SEPARATIONS IN HALF THE TIME

Figure A. A comparison of an apotransferrin tryptic digest using HALO 2 Peptide ES-C18 at two different flow rates.

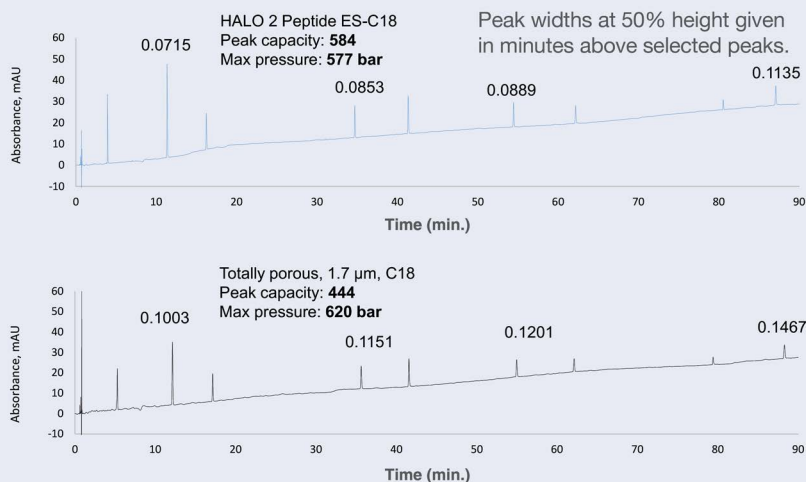


#### TEST CONDITIONS:

**Column:** 2.1 x 150 mm, HALO 2 Peptide ES-C18  
**Part Number:** 91122-702  
**Mobile Phase A:** water/0.1% TFA  
**Mobile Phase B:** 80/20 ACN/water/0.1% TFA  
**Gradient:** as indicated  
**Flow Rate:** as indicated  
**Temperature:** 60°C  
**Detection:** 215 nm  
**Injection Volume:** 15 µL of apotransferrin tryptic digest  
**Sample Solvent:** water/0.1% TFA  
**Response Time:** 0.025 sec.  
**Data Rate:** 40 Hz  
**LC System:** Shimadzu Nexera X2

## 20% GREATER PEAK CAPACITY

Figure B. High peak capacity values generated at lower back pressures compared to a totally porous sub-2  $\mu\text{m}$  particle column.



### TEST CONDITIONS:

**Columns:** 2.1 x 150 mm  
**HALO Part Number:** 91122-702  
**Mobile Phase A:** water/0.1% TFA  
**Mobile Phase B:** 80/20 ACN/water/0.1% TFA  
**Gradient:** 5-50% B in 90 min.  
**Flow Rate:** 0.5 mL/min.  
**Temperature:** 60°C  
**Detection:** 215 nm  
**Injection Volume:** 0.5  $\mu\text{L}$   
**Sample Solvent:** water/0.1% TFA  
**Response Time:** 0.025 sec.  
**Data Rate:** 40 Hz  
**LC System:** Shimadzu Nexera X2

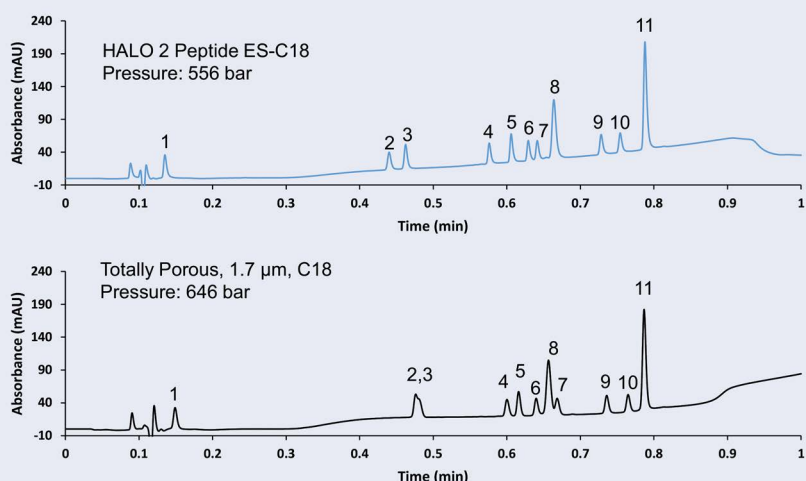
### PEAK IDENTITIES - MW (g/mol):

- |                                  |                                    |                              |
|----------------------------------|------------------------------------|------------------------------|
| 1. Asp-Phe - 280                 | 4. Angiotensin II - 1046           | 7. $\beta$ -endorphin - 3465 |
| 2. Tyr-Tyr-Tyr - 508             | 5. Angiotensin (1-12) human - 1509 | 8. Sauvagine - 4599          |
| 3. Angiotensin (1-7) amide - 898 | 6. Neurotensin - 1673              | 9. Melittin - 2847           |

Comparative results presented here may not be representative for all applications.

## HIGHER RESOLUTION IN ONE MINUTE

Figure C. Small 2  $\mu\text{m}$  particle size of HALO 2 Peptide ES-C18 columns enable higher resolution than a totally porous sub-2  $\mu\text{m}$  column.



### TEST CONDITIONS:

**Columns:** 3.0 x 50 mm  
**HALO Part Number:** 91123-402  
**Mobile Phase A:** water/0.1% TFA  
**Mobile Phase B:** 80/20 ACN/water/0.1% TFA  
**Gradient:** Hold at 12.5% B until 0.1 min.; 12.5-63% B from 0.1 – 1.0 min.  
**Flow Rate:** 2.2 mL/min.  
**Temperature:** 60°C  
**Detection:** 215 nm  
**Injection Volume:** 0.5  $\mu\text{L}$   
**Sample Solvent:** water/0.1% TFA  
**Response Time:** 0.025 sec.  
**Data Rate:** 200 Hz  
**LC System:** Shimadzu Nexera X2

### PEAK IDENTITIES:

- |                                |                               |                                |
|--------------------------------|-------------------------------|--------------------------------|
| 1. Gly-Tyr                     | 6. Angiotensin II             | 11. Angiotensin (1-12) (human) |
| 2. Val-Tyr-Val                 | 7. Leu-enk                    |                                |
| 3. Angiotensin 1/2 (1-7) amide | 8. Ribonuclease A             |                                |
| 4. Met-enk                     | 9. Angiotensin (1-12) (mouse) |                                |
| 5. Angiotensin 1/2 (1-8) amide | 10. Porcine Insulin           |                                |

Comparative results presented here may not be representative for all applications.

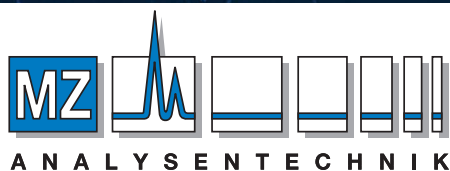
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<http://www.advanced-materials-tech.com/find-a-distributor/>.

# HALO<sup>®</sup> 2

## PEPTIDE

HALO 2 Peptide ES-C18 Columns			
PART NO.	SIZE (mm)	PART NO.	SIZE (mm)
91122-202	2.1 x 20		
91122-302	2.1 x 30	91123-302	3.0 x 30
91122-402	2.1 x 50	91123-402	3.0 x 50
91122-502	2.1 x 75	91123-502	3.0 x 75
91122-602	2.1 x 100	91123-602	3.0 x 100
91122-702	2.1 x 150	91123-702	3.0 x 150

HALO 2 Peptide ES-C18 Guard Columns, 3/Pack	
PART NO.	SIZE (mm)
91122-102	2.1 x 5
91123-102	3.0 x 5
94900-001	Guard Column Holder



#### AUTHORIZED DISTRIBUTOR

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