

REDUCE PEPTIDE MAPPING TIME WITHOUT LOSING RESOLUTION

The Measure of Confidence



Agilent AdvanceBio Peptide Mapping BioHPLC Columns

Biopharmaceutical discovery and development require you to characterize a target molecule's primary sequence to confirm its identity, and/or determine amino acid substitutions or modifications that may occur during manufacturing. It is currently necessary to use high-resolution techniques to resolve individual peptides for identification and quantitation. Accordingly, conventional peptide mapping with fully porous HPLC columns can take 60 minutes or longer to complete.

Agilent AdvanceBio Peptide Mapping columns let you quickly resolve and identify amino acid modifications in primary structure

These advanced biocolumns feature a 120Å pore size with superficially porous 2.7 µm particles. They are specially tested with a challenging peptides mix to ensure reliable peptide mapping performance. In addition, AdvanceBio Peptide Mapping columns deliver exceptional resolution and speed for UHPLC, and excellent results for conventional HPLC too.

- **Greater analytical confidence:** Each batch of AdvanceBio Peptide Mapping media is tested with a rigorous peptide mix to ensure suitability and reproducibility, and to enable the identification of key peptides in complex peptide maps.
- **Save time:** 2 to 3 times faster than fully porous HPLC columns.
- **Every instrument works harder:** 4.6, 3.0, and 2.1 mm id columns are stable to 600 bar, enabling you to get the most from your UHPLC instruments. They can also deliver excellent performance for your legacy 400 bar instruments, too.
- **Increased flexibility:** Achieve increased MS sensitivity with formic acid mobile phases on any HPLC.

AdvanceBio columns are rigorously tested to ensure reproducibility and confidence in your results. They are also backed by Agilent's 60-day full satisfaction warranty. See more about AdvanceBio columns on the back page.

With their 2.7 µm particles and C18 functionality, Agilent AdvanceBio Peptide Mapping columns provide excellent retention, resolution, and peak shape for basic hydrophobic peptides.

To learn more, visit
agilent.com/chem/AdvanceBio

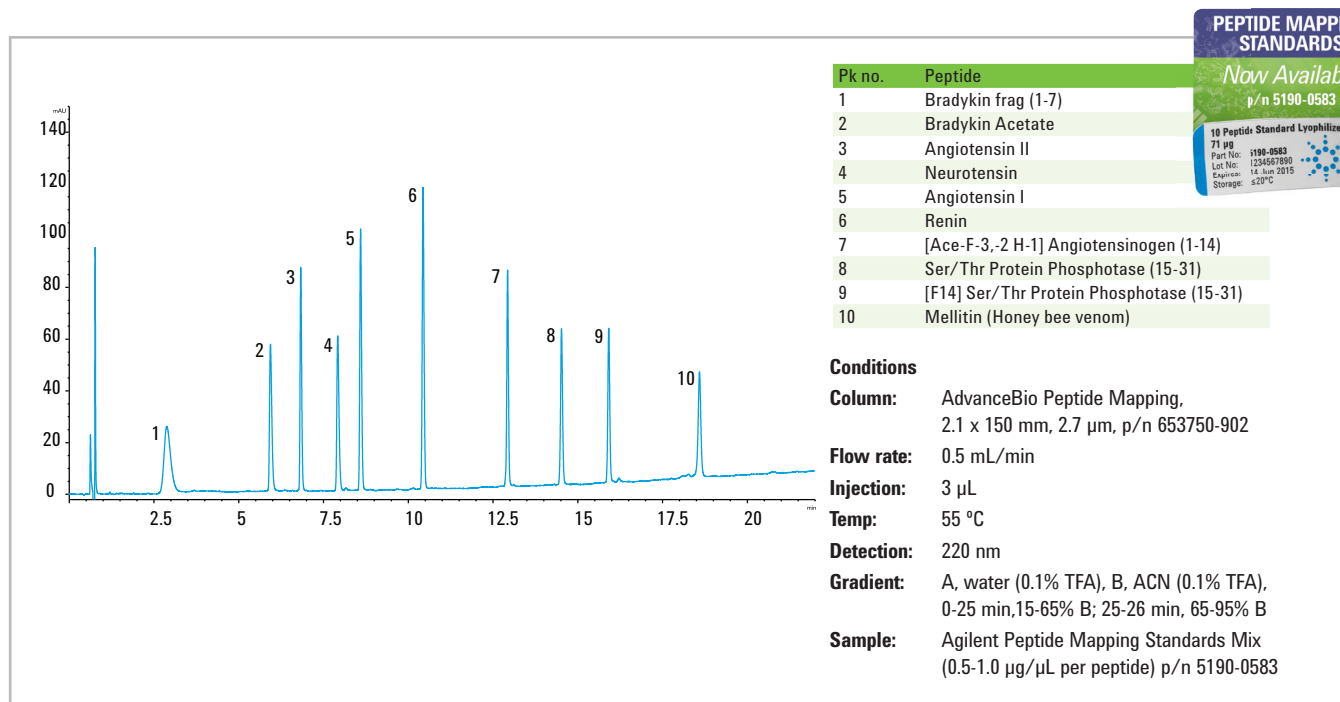


Agilent Technologies

Quickly confirm the identity of target proteins and peptides

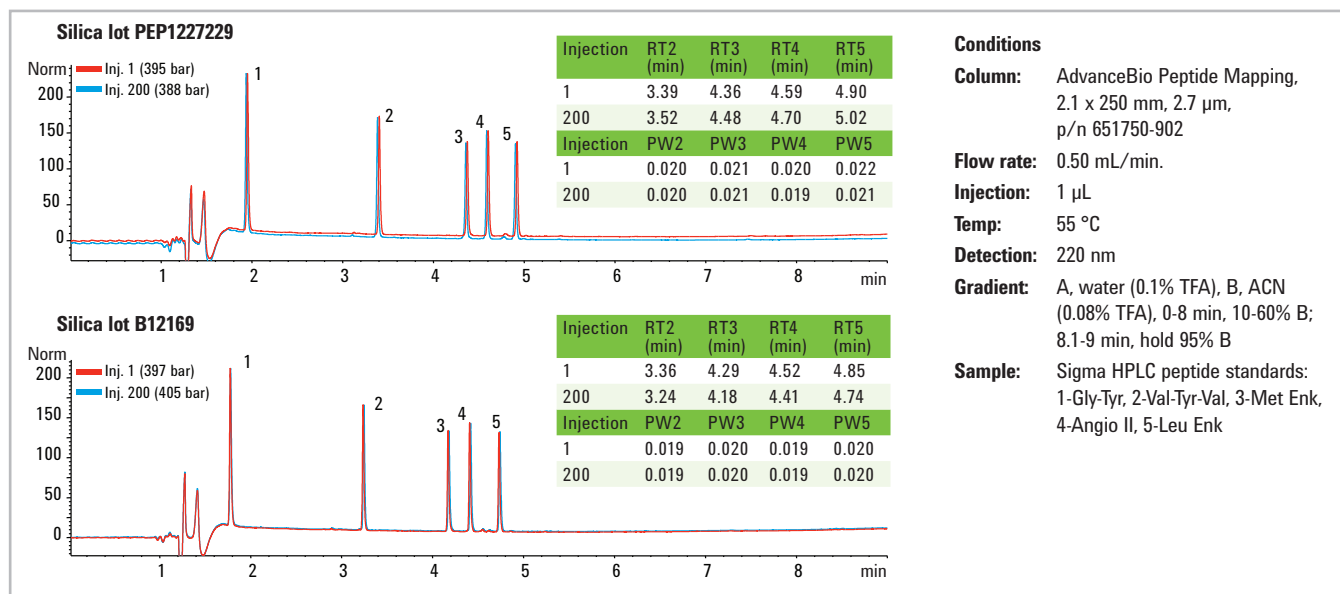
Quality Assurance Testing with Agilent Peptide Mix

Test mix used for every batch of AdvanceBio Peptide Mapping media. The mixture contains 10 hydrophilic, hydrophobic, and basic peptides, ranging in molecular weight from 757 to 2845 Da. Every column is also tested with a small-molecule probe to ensure efficiency.



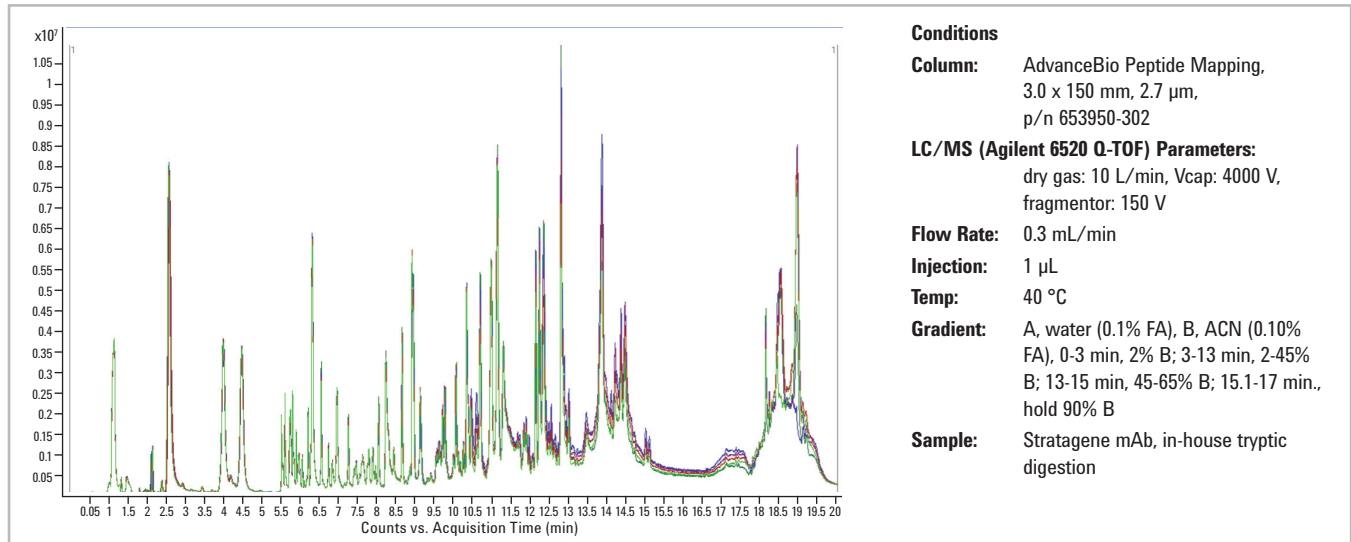
Lot-to-Lot Reproducibility after 200 Injections

Superior reproducibility, lot-to-lot and run-to-run. A 2.1 x 250 mm AdvanceBio Peptide Mapping column was used for maximum resolution.



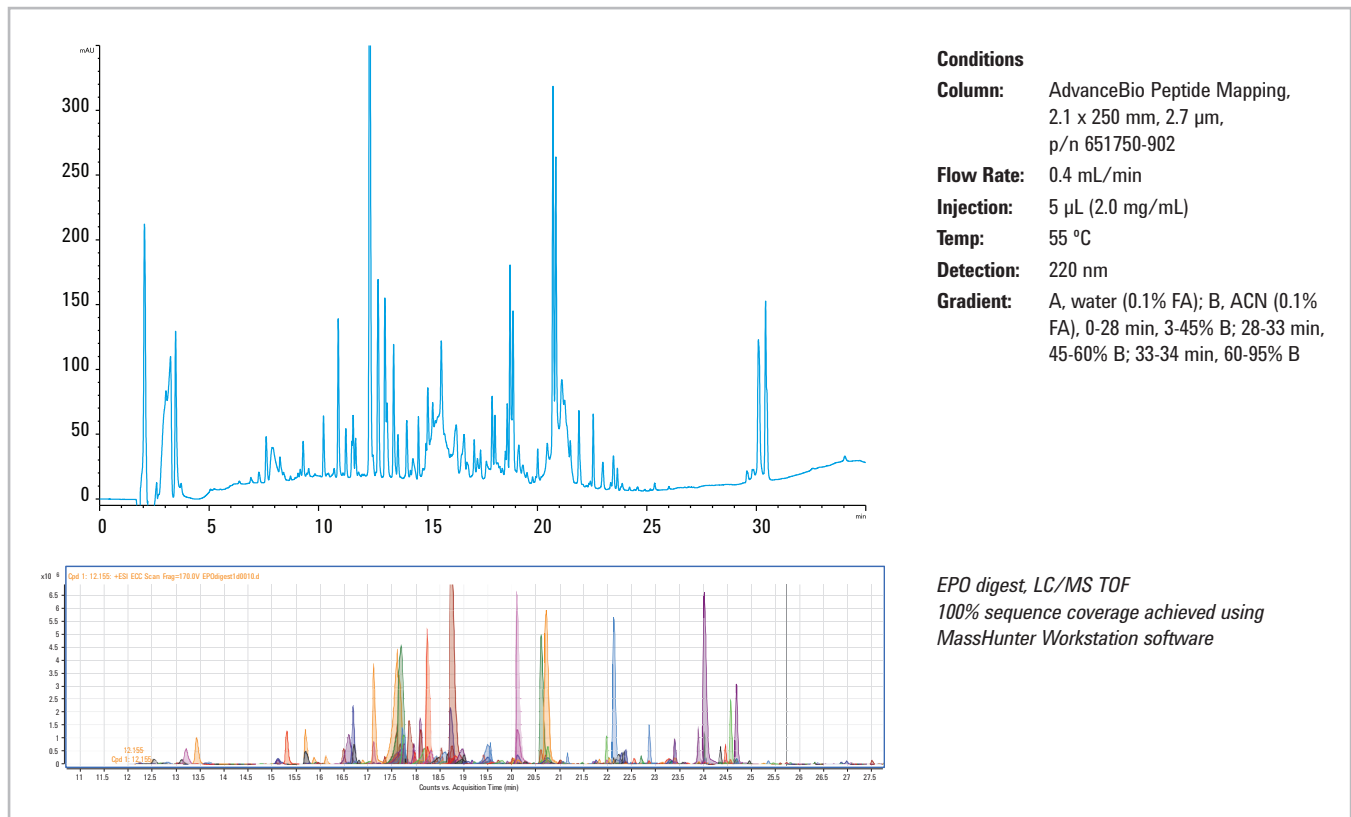
LC/MS Reproducibility

Excellent reproducibility of peak heights and retention times for more accurate identification of target peptides. The entire IgG1 tryptic peptide map was completed in just 20 minutes (n=5).



Peptide Map of a Biosimilar EPO

The **top chromatogram** shows a peptide map of a highly glycosylated EPO from a biosimilar. Note the excellent resolution achieved for small peptide fragments using UV detection. The **bottom chromatogram** shows the same separation using mass spectroscopy to determine the sequence coverage (100%). UV detection is used for comparing peptide maps, while MS is ideal for identifying amino acid substitutions and modifications. So, you can easily confirm protein identity, and identify any post-translational modifications, using the AdvanceBio Peptide Mapping column.



To order now, visit agilent.com/chem/AdvanceBio

Agilent AdvanceBio columns:

For faster, more consistent biopharmaceutical analysis

AdvanceBio Peptide Mapping columns are part of Agilent's growing state-of-the-art family of biocolumns. They are designed to deliver consistent, exceptional performance for the separation and characterization of peptides and proteins, antibodies, conjugates, new biological entities, and biopharmaceuticals.

The science behind AdvanceBio columns helps to advance accuracy and productivity that support faster analysis and efficiency in your lab.



Ordering Information: Agilent AdvanceBio Peptide Mapping Columns

Description	Part Number
4.6 x 150 mm, 2.7 μ m	653950-902
3.0 x 150 mm, 2.7 μ m	653950-302
2.1 x 250 mm, 2.7 μ m	651750-902
2.1 x 150 mm, 2.7 μ m	653750-902
2.1 x 100 mm, 2.7 μ m	655750-902
4.6 mm Fast Guard*	850750-911
3.0 mm Fast Guard*	853750-911
2.1 mm Fast Guard*	851725-911

*Fast Guards extend column lifetime without slowing down the separation or affecting resolution.



Pair your AdvanceBio columns with the Agilent 1200 Infinity Series, including the 1260 Infinity Bio-inert LC for increased speed and sensitivity. Learn more at agilent.com/chem/infinity

To learn more about Agilent Peptide Mapping columns – and our full line of AdvanceBio columns – visit agilent.com/chem/AdvanceBio

Or find your local Agilent Representative or Agilent Authorized Distributor at agilent.com/chem/contactus

This information is subject to change without notice.
© Agilent Technologies, Inc., 2013
Printed in USA, August 23, 2013
5991-1696EN

