

The Overture™ Robotic Peptide Library Synthesizer: The Most Flexible Platform on the Market Today.

Protein Technologies, Inc.

The Overture™ Robotic Peptide Library Synthesizer from Protein Technologies, Inc. (Figure 1) celebrates its 1 year anniversary in 2011. As the fastest, most flexible and efficient robotic synthesizer on the market today, the Overture™ enjoys a rapidly expanding user-base worldwide! First launched at Pittcon in March 2010, the Overture™ has been well received at both the European and American Peptide Symposia, and now comes standard with a convenient solvent cabinet.

The Overture™ was designed to be lightyears ahead of existing robotic platforms, with never before seen features such as six independent reaction vessel blocks, allowing different programs and scales to be run at the same time, single-point calibration, long-life pierceless cartridges in place of septa, extremely fast flood-fill fluid deliveries for deprotection and washing, independent amino acid dispensers which do not require rinsing between deliveries, and automated cleavage without user intervention.

Whereas existing robotic units are unable to synthesize peptides longer than 15-20 amino acids long with good crude purity due to septa failure and cross-contamination issues, the Overture™ can successfully synthesize long peptides like the 68-mer chemokine SDF-1 α (KPVLSYRCP CRFFESHVAR ANVKHLKILN TPNCALQIVA RLKNNNRQVC IDPKLWIQE YLEKALNK-OH) at equivalent purities to non-robotic units like the Prelude® (Figure 2). Plus, it is so flexible that it can synthesize peptides at different scales in the same synthesis (Figure 3), and can even run Fmoc and Boc chemistry at the same time [1, 2]!

Protein Technologies, Inc. has been a global leader in automated peptide synthesis instrumentation for over 25 years and strives to continually provide its customers with the most innovative technologies for their peptide synthesis needs.

References:

- [1] http://www.peptideinstruments.com/doc_files/doc_481.pdf
[2] http://www.peptideinstruments.com/doc_files/doc_482.pdf



Figure 1: The Overture™ Peptide Synthesizer from Protein Technologies, Inc.

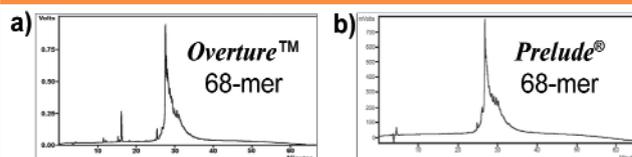


Figure 2: HPLC results for the 68-mer chemokine SDF-1 α synthesized on the a) Overture™ and b) Prelude®.

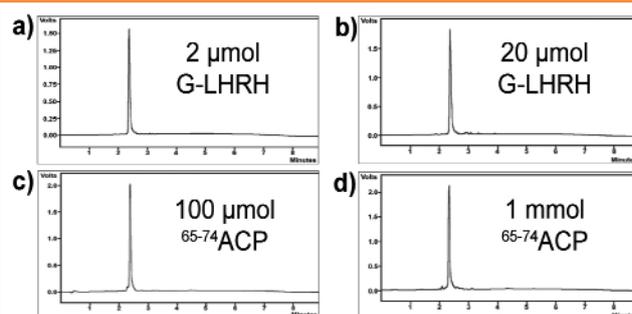


Figure 3: HPLC results for crude peptides synthesized simultaneously on the Overture™ at different scales. a) G-LHRH: 2 μ mol scale; b) G-LHRH: 20 μ mol scale; c) ⁶⁵⁻⁷⁴ACP: 100 μ mol scale; d) ⁶⁵⁻⁷⁴ACP: 1 mmol scale. G-LHRH sequence: GHWSYGLRPG-NH₂; ⁶⁵⁻⁷⁴ACP sequence: VQAAILYING-OH.

Protein Technologies, Inc.

For more information, please contact:

Protein Technologies, Inc.

4675 S. Coach Dr., Tucson, AZ 85714, U.S.A.

Tel: +1-520-629-9626, Fax: +1-520-629-9806

Email: info@ptipep.com, Web: www.ptipep.com

Why Compromise?

Get the best tools for your research with a peptide synthesizer from Protein Technologies, Inc.!

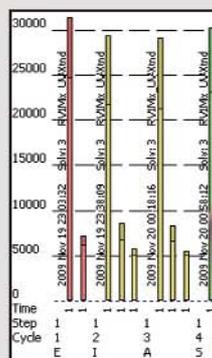
OvertureTM Robotic Peptide Library Synthesizer



- 0.001 - 24 mmol Scale
- 96 (1.3 or 10 mL) or 24 (1.3, 10, 40 or 45 mL) RV Configurations
- 49 Amino Acid Positions (4.9 L Total Capacity)
- 6 Solvent Positions
- Run 6 Different Programs/Scales Simultaneously
- No Rinsing Between AA Deliveries – Saves Solvent & Time!
- Auto Library Generation & Sequence Placement
- Single-Point Calibration of Robot Arm
- Fully Automated Cleavage – No Manual Intervention!
- Convenient Solvent Cabinet Configuration

Tribute[®] with UV Monitoring

- 2 Independent RV's (1.3, 10, 40, or 45 mL, 0.005 - 2.0 mmol Scale)
- 101 Unattended Couplings
- On-Line UV Monitoring System
- Monitors Every 10 Seconds **During** the Deprotection Reaction
- Only UV System That Controls Deprotection **Times** and **Repetitions**
- Minimize Trial-and-Error When Synthesizing Difficult Peptides
- Graph Individual Deprotection Reactions or Overall Data for a Synthesis



Identify Difficult Reaction Steps **Before**, **During** and **After** a Synthesis!