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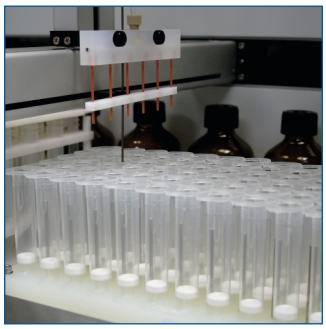
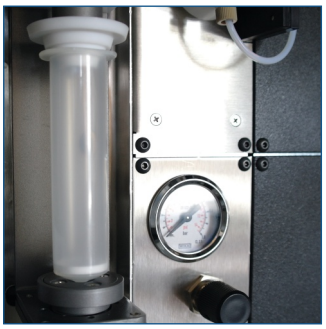
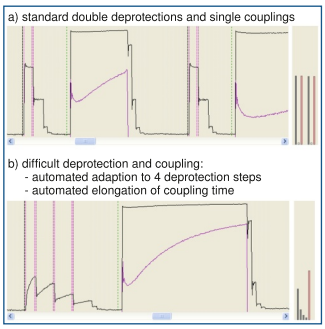
Bioanalytical Instruments

MultiPep CF

Continuous Flow and Parallel Peptide Synthesizer



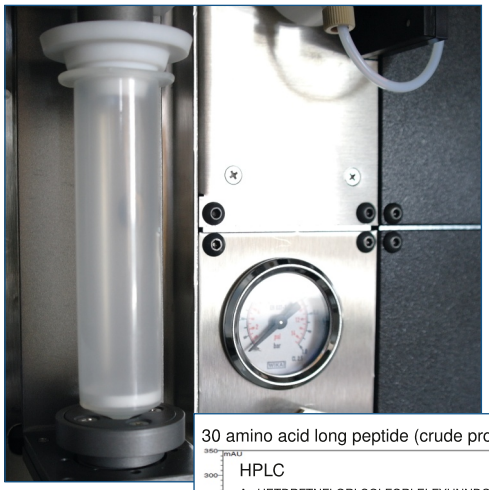


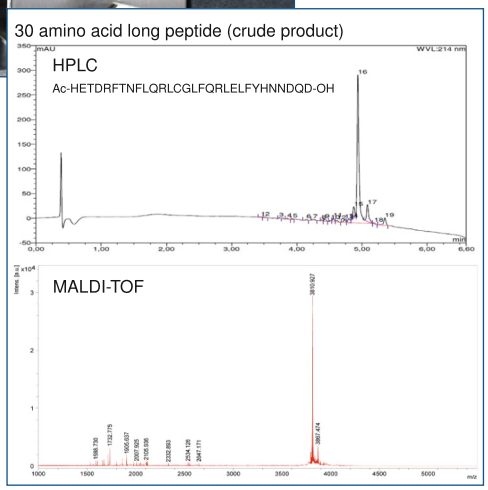


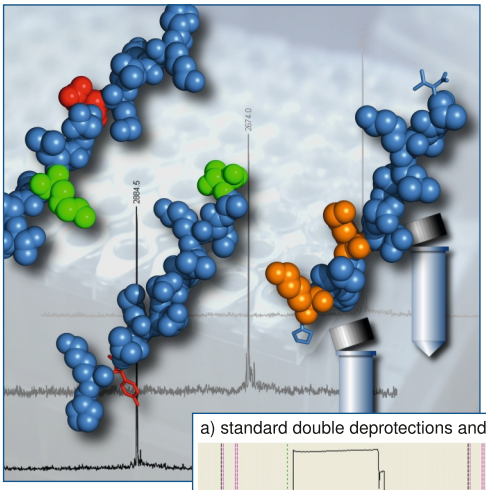
Continuous flow synthesis with real-time UV monitoring option

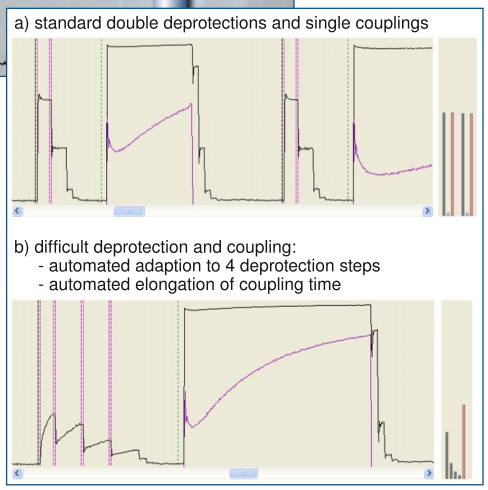
The ***MultiPep CF*** is a fully automated peptide synthesizer with a unique column module that allows the synthesis of long and difficult sequences. Optional UV monitoring in real-time enables the optimization of reaction parameters like deprotection and coupling times during the synthesis. The continuous monitoring can be used to automatically adapt the number of washing steps as well. This leads to a significant reduction of solvent consumption. The ***MultiPep CF*** is the only peptide synthesizer with a real-time continuous UV monitoring with a long life LED light source.

- Mixing by vortexing and continuous flow
- Real-time UV monitoring option
- Inert gas option
- Large scale synthesis (0.05 - 2mmol)
- Disposable columns (12, 25 and 40ml)
- Optimized usage of reagents









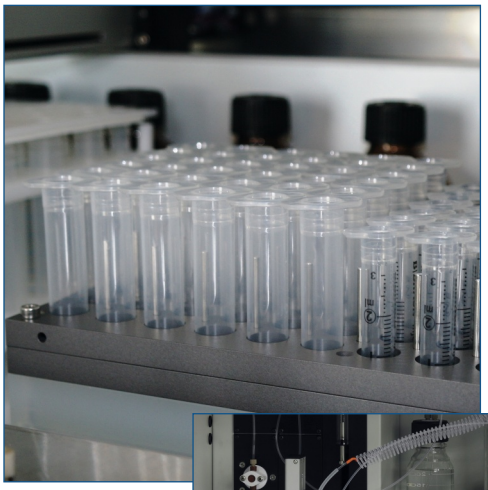
UV monitoring feedback - automated method optimization

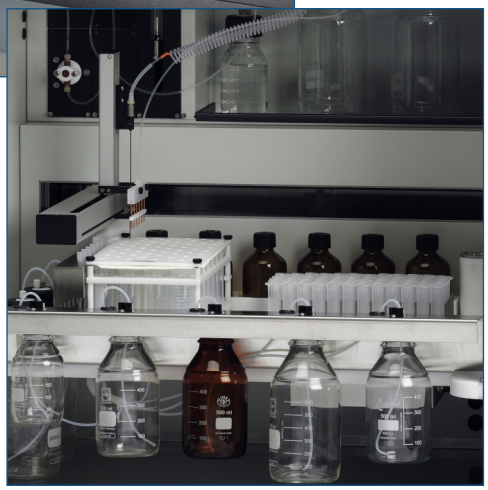
Synthetic peptides have become important tools in many areas of molecular biology. Even long sequences can be synthesized quickly and with high quality using the ***MultiPep CF***. The real-time UV detection system monitors the Fmoc-cleavage reactions and automatically extends the deprotection and coupling times in difficult regions. An elongated or double coupling step can follow multiple deprotections before the system proceeds with the next cycle. The user can program the synthesizer to perform more complex operations based on the monitoring data. Other choices could be multiple couplings, changing coupling conditions or reducing the number of washing steps needed. This leads to a greater coupling yield and superior peptides and also saves time and reduces reagent waste.

- Long lifetime LED light source
- Automated method optimization

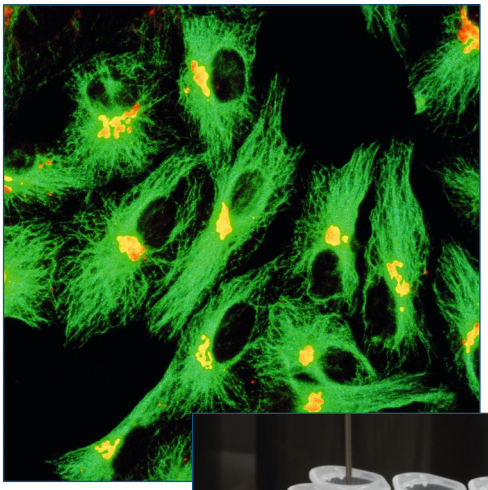
MultiPep CF - 72 column module for parallel peptide synthesis

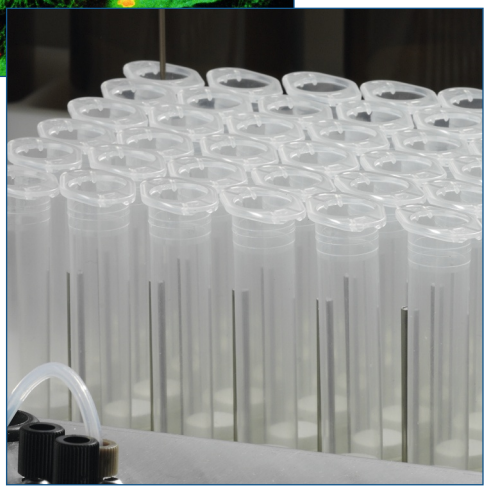
The ***MultiPep CF*** can be upgraded with a 72 column module for the parallel synthesis of peptides at 10-500 µmol scales. The instrument is based on a pipetting robot with a single needle. A multi-channel manifold is used for rapid solvent delivery and washing via a robust pump connected to a ceramic 6-port valve.
The column module allows the parallel synthesis in 72, 36 or 18 disposable filter columns at 10-100, 50-300 or 100-500 µmol scales respectively. Vortexing and heating options ensure reliable agitation of reagents and resin by optimizing reaction conditions at larger scales.





- Fast parallel synthesis in filter columns
- 2, 5, 10 or 25 ml columns for 10-500 µmol scales
- Software controlled vortexing speeds
- Optional 72 position thermo-reaction-block
- A single run can yield up to 10.8 mmol of peptide





Libraries and quality peptides

The ***MultiPep CF*** is a fully automated high-throughput peptide synthesizer. Utilizing exchangeable modules, the ***MultiPep CF*** can be used as a single column synthesizer with real-time UV monitoring for excellent quality or as a parallel synthesizer for the synthesis of up to 72 peptides in individual filter columns. The instrument can cover a broad range of requirements for core facilities, research laboratories and custom synthesis houses. Up to 6 solvent positions and 13 additional reagent bottles guarantee the flexibility to run complex protocols.

- One high quality peptide at 50-2000 µmol
- Up to 72 individual peptides at 10-100 µmol
- Up to 36 individual peptides at 50-300 µmol
- Up to 18 individual peptides at 100-500 µmol
- Fast parallel solvent delivery

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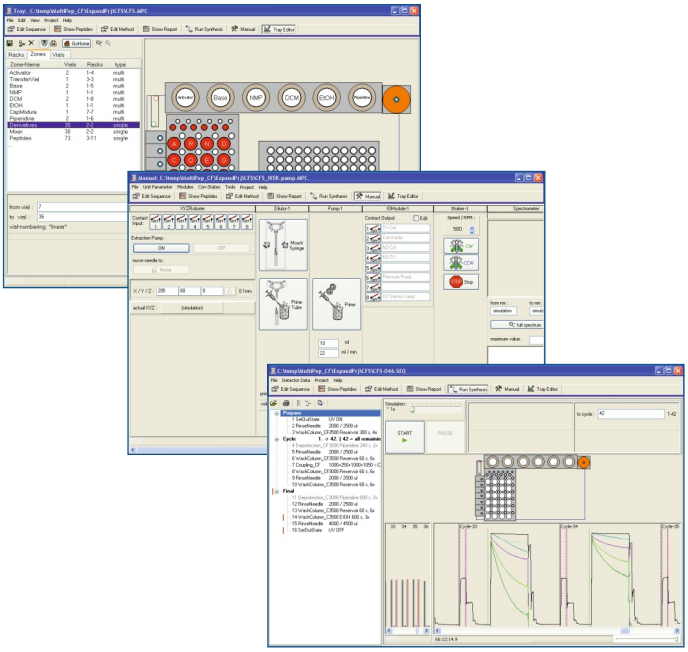

Intuitive operation software

The ***MultiPep CF*** is operated by Windows™ based software running on a standard PC.

- Graphical user interface
- Import and export of sequences
- Pre-configured synthesis protocols
- Easy method development
- Calculation of reagent consumption
- Real-time display of instrument operation
- Detailed documentation of each run
- Prediction of "difficult sequences"

Specifications

- Solid phase Fmoc peptide synthesis
- Activation by PyBOP, HBTU, DIC/HOBt or similar chemistries
- Pre-activation in dedicated vials with freely defined times
- Real-time UV monitoring option
- Optional inert gas (reagent bottles and synthesis column)
- Detailed specification of synthesis parameters
- Variable mixing speeds
- Open access to the work area during operation
- Closed cabinet with built in exhaust fan
- Up to 13 additional reagent positions available

MultiPep CF with UV monitoring (active mixing, orbital shaker and continuous flow pump)

Synthesis scale:	one peptide at 50 - 2000 µmol scales The synthesis takes place in 12, 25 or 40 ml disposable columns. Continuous UV monitoring with feedback - automated method optimization for deprotection, coupling and washing steps.

Available modules:

Column synthesis module with shaker (software controlled variable vortexing speeds):

Synthesis scale:	up to 72x 10 - 100 µmol, 36x 50 - 300 µmol or 18x 100 - 500 µmol
Number of peptides per run:	up to 72
Number of reagents:	up to 13 (2x 1 - 10 L / 5x 50 - 750 ml / 6x 200 ml)
Number of derivatives:	racks with 25, 30 and 48 vessels and dedicated mixer vials are available rack 1: 24x 50 ml & 6x 10 ml; rack 2: 20x 120 ml & 5x 35 ml; rack 3: 48x 13 ml & 48x 1.8 ml; custom made racks (optional)

More modules for resin synthesis at different scales are on available on request.

Power:	Voltage: 220/240 V, 50 Hz or 110/115 V, 60 Hz
Dimensions:	76.2 x 72.6 x 81.0 cm (width x depth x height) [30.0 x 28.6 x 31.9 inches]
Weight:	110 kg (240 lbs, work area included)

More information: Please contact us at info@intavis.com or visit www.intavis.com

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