

Peptide-ExplorerLT™

EXPLORE AND OPTIMISE THE SYNTHESIS OF LINEAR PEPTIDES

The Peptide-ExplorerLT is a fast-flow peptide synthesiser designed for peptide chemists who want a flexible yet compact synthesiser for making and optimising linear peptides at scales between 0.05 mmol and 1 mmol.



Key features of the Peptide-ExplorerLT™

- Compact footprint
- Low price point
- Synthesis scale 0.05 – 1.00 mmol
- Ideal for research
- State of the art peptide synthesis software
- Fmoc solid phase peptide chemistry with DIC and oxyma activation
- Minimises solvent and reagent use compared with competing products
- Continuous in-line analytics including resin solvation data and UV absorption data
- Fast cycle times even at larger scale

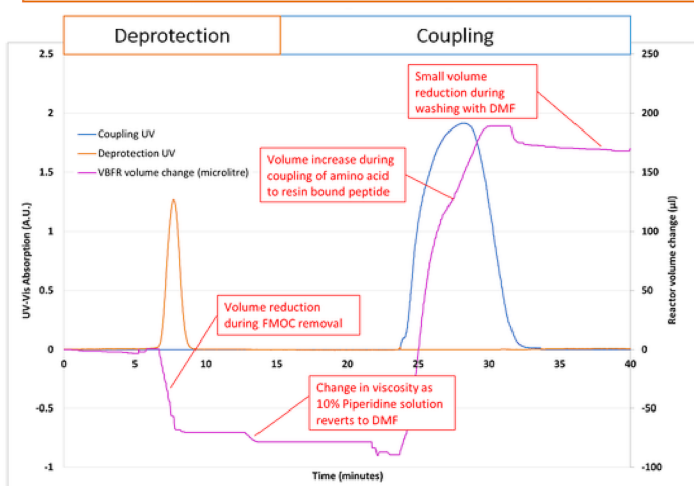
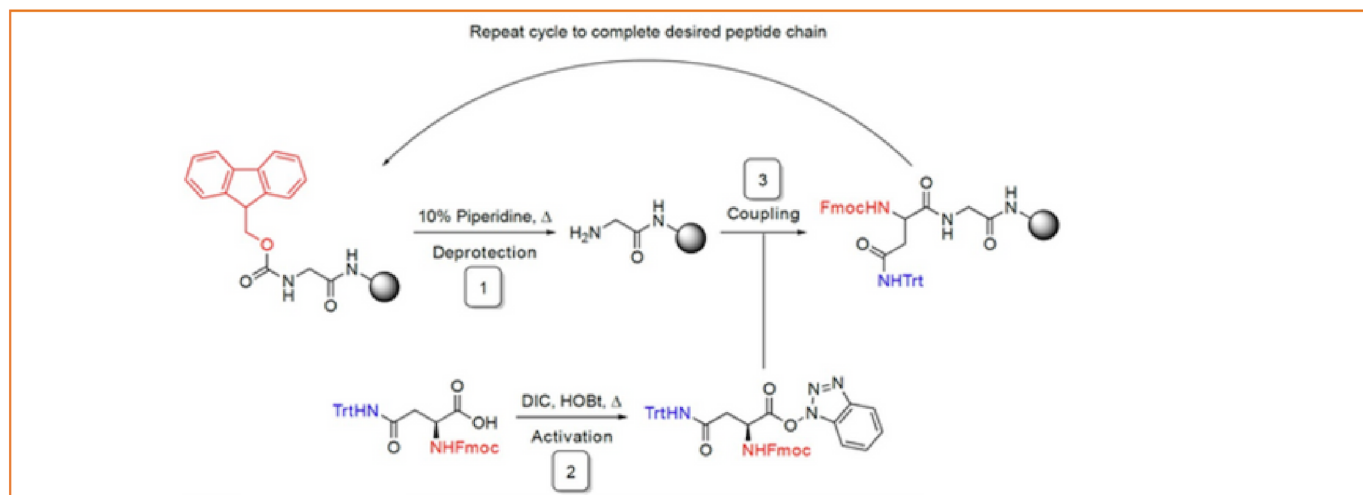
Vapourtec patented VBFR

The system uses Vapourtec's patented variable bed flow reactor (VBFR) technology to provide short synthesis times and the highest crude purity in combination with rich data from every synthesis.

Three reactor sizes are available with maximum working volumes of: 4 ml, 9.5 ml and 21 ml. These provide synthesis scales in the range of 0.05 to 1.0 mmol.



The Peptide-ExplorerLT has been optimised to give excellent results when using the rugged and reliable industry standard chemistry; Fmoc solid phase peptide chemistry with DIC and oxyma activation.



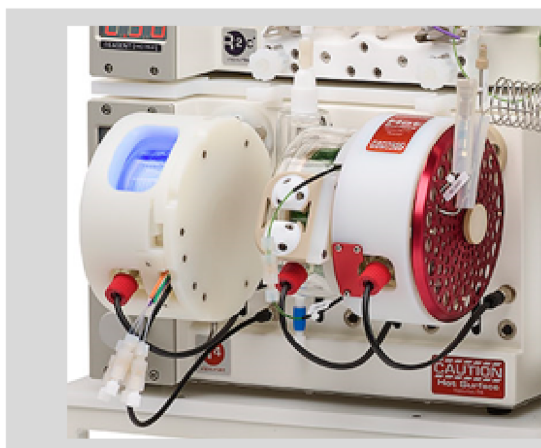
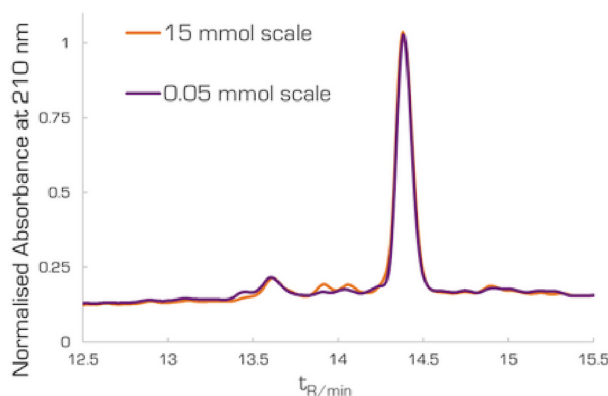
Real time monitoring

The Vapourtec fast-flow solid phase peptide synthesis (FF-SPPS) process provides high quality real-time data of a quality and resolution never seen before. Aggregation events can be identified not just to a particular cycle but down to a 5 second window pin-pointing when the aggregation occurred.

In addition, UV data is recorded by monitoring 100% of the wash solvent flows exiting the reactor. The UV data can therefore perform an AUC calculation that can be used to quantify the true amount of Fmoc exiting the reactor.

Linear scale-up

A synthesis optimised at 0.05 mmol can be scaled up to 30 mmol using the Vapourtec PS-30 pilot scale peptide synthesiser without further optimization. As an example GLP-1 was scaled up from 0.05 to 15 mmol with identical crude purities at both scales.



Beyond peptide synthesis

The Peptide-ExplorerLT has been optimised for peptide synthesis. However, it can be used as a flow chemistry system for a range of applications. By replacing the VBFR with other reactors from Vapourtec's comprehensive range, the Peptide-ExplorerLT system can be used for fully automated small molecule synthesis.

Options include thermally-mediated, photochemical and electrochemical reactions, as well as using organometallic reagents.



About Vapourtec

Vapourtec is the world's leading manufacturer of laboratory scale flow chemistry instruments. Founded in 2003, Vapourtec has been at the forefront of the flow chemistry industry ever since.

Headquartered near Cambridge, UK, Vapourtec design and manufacture the R-Series and E-Series flow chemistry systems together with an exciting range of innovative fast-flow peptide synthesisers. Vapourtec instruments have empowered chemists throughout the world to further scientific discovery.

Trusted by scientists, chemists, and fine chemical manufacturers around the world, the modular R-Series system has revolutionized the way many deliver the research, chemicals, and products we all rely on. With an installation base of more than 750 instruments, resulting in being cited in over 1,000 peer reviewed scientific publications, we continue to support our customers across the globe with the world-class products and services with which Vapourtec has become synonymous.



World class



Innovative



Precise

vapourtec
precision flow chemistry

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