

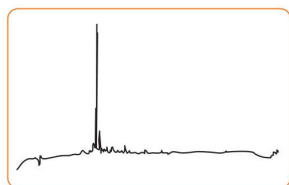


# Activo-Darwin LS Peptide Synthesizer

The Activo-Darwin Peptide Synthesizer is an economical semi-automated instrument for the synthesis of very high quality peptides on an increased scale.

## Key Features

- High quality peptides
- Any scale from 1.0 mmole to 20.0 mmoles
- Easy to use; use existing or define your own protocols
- Automates the resin washing and deprotection steps of synthesis
- Performs any Fmoc or t-Boc chemistries
- Green chemistry compatible
- Optional Fmoc removal monitoring via UV
- Safe to use, instrument is totally enclosed
- Glass reactors
- Use commercially available resins and reagents



**Sequence:** GRKKRRQRRRGYKCC

Scale: 4 mmol

Synthesis: conventional room temperature Resin: Rink MBHA, 0.64 mmol/g

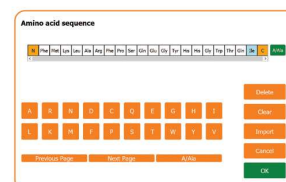
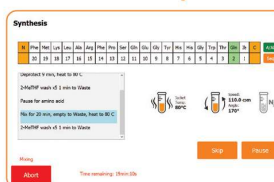
Double coupling PyBOP/DIEA in DMF, 3 eq. amino acids and 2.8 eq. PyBOP Cleavage: 94% TFA, 2.5% EDT, 2.5% H<sub>2</sub>O and 1% TIS  
Crude purity 94%



## High Quality Peptide

- Inert atmosphere throughout
- Precise and fast solvent delivery and washing
- Efficient inversion mixing
- Nitrogen bubbling mixing

## Easy to use touch screen interface



## Ease of Use

- Very easy to use touch screen display
- Enter the sequence, fill in quantity and resin and press run
- Software generated worksheet tells the user what to prepare
- Free choice of chemistry, present and future
- Logfile of each synthesis
- Easy cleave system direct from the reactor
- Email notifications

## Chemistry

- Fmoc or t-Boc
- In situ or pre-activation
- Green chemistries
- Coupling reagents HBTU, HCTU, HATU, TBTU, PyBOP, DIC, COMU, etc
- Use any resins: polystyrene or PEG
- Use any protocols
- Synthesize any length peptides



Reactor mixing



1000mL reactor with cleavage

## Instrument Specifications

|                         |   |
|-------------------------|---|
| Scale                   | 1.0 – 20.0 mmoles   |
| Chemistry               | Fmoc or t-Boc   |
| Activation method       | Pre-activation or in situ, user selectable. HATU, HBTU, HCTU, DIC, PyBOP, etc |
| Reaction vessel sizes   | 125 mL, 250 mL, 500 mL, 1000mL  |
| Reagent/solvent bottles | 4 as standard, range from 250 mL to 19 litres,                                |
| UV Monitoring           | Check the Fmoc removal via UV   |
| Mixing system           | Over centre mixing with variable speed and amplitude, nitrogen bubbling       |
| Inert atmosphere        | 100% throughout the system  |
| Fluid measurement       | Timed delivery  |
| Power                   | Variable range from 240V/50Hz or 100V/60Hz                                    |
| Logfile                 | Printable logfile for each synthesis run                                      |
| Dimensions              | Width 42 cm (17"), depth 31 cm (12"), height 60 cm (24")                      |

## Technical Support

Activotec has unsurpassed experience in the synthesis and automation processes for peptides. Activotec is totally committed to supporting its customers worldwide.

- Fast reliable service engineers and application chemists.
- Service contract options are available to suit your requirements.
- Peptide chemists are available to help with instrument application and peptide chemistry if required.
- Training is provided on site or in our facility.

**Headquartered in Cambridge, UK Activotec is a producer of state-of-the-art synthesis technology providing chemists with useful and reliable peptide synthesis products.**

- Peptide synthesizers, amino acids, resins and reagents.

**If you would like further details of the Activo-Darwin synthesizer or any of Activotec's range of synthesis instruments or chemicals please contact our office below.**



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