



Activo-Darwin Peptide Synthesizer

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

## **Key Features**

- High quality peptides
- Any scale from 0.05 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
- Automated optional reactor heating to 90°C
- Safe to use, instrument is totally enclosed
- Disposable reactors
- Use commercially available resins and reagents





#### Sequence: GRKKRRQRRRGYKCC

Scale: 0.16 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% H20 and 1% TIS Crude purity 94%

# **High Quality Peptide**

- Inert atmosphere throughout
- Precise and fast solvent delivery and washing
- Efficient inversion 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 disposable 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



Easy access to reactor for reagent addition or sampling



**Heated reactors** 

Instrument Specifications	
Scale	0.05 – 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	10 mL, 40 mL, 125 mL, 250 mL, 500 mL
Reagent/solvent bottles	3 as standard, range from 250 mL to 19 litres, 4th optional
Reactor heating	Ambient to + 90° C
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.



**Activotec Ltd** 

www.activotec.com