

Spirit of Innovation



Titan 357

Automated Split-and-Combine Synthesizer



Titan 357

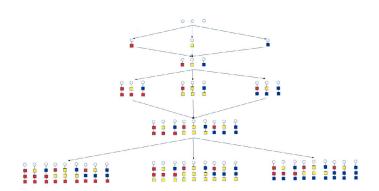
Automated Split-and-Combine Synthesizer

The Titan 357 synthesizer is a powerful tool for drug discovery. It serves as three automated synthesizers in one. As a parallel synthesizer it prepares up to 36 peptides simultaneously. It is also a 550 mL scale-up synthesizer, as well as a split-and-combine synthesizer for preparing combinatorial peptide libraries. It can prepare split-and-combine libraries containing millions of compounds for high throughput screening and lead discovery. In lead development and optimization studies, the Titan 357 can prepare up to 36 peptides simultaneously. Finally, it can prepare single peptides in multi-gram quantities for initial in vivo testing.

Split-and-Combine Synthesizer

 The Titan 357 utilizes the split-and-combine protocols developed by Furka, Lam, Hruby and Houghton to automatically generate combinatorial libraries containing thousands to millions of compounds. Designing custom libraries is simple with its versatile, easy-to-use software. The user can create completely randomized peptide libraries or libraries of peptides with only a few randomized positions within the sequence.





• Parallel Synthesizer

The Titan 357 can prepare up to 36 separate peptides simultaneously. Gentle but efficient vortex mixing thoroughly mixes the resin in the (36) 10-mL reaction units of the reactor assembly. The delivery robots of the Titan 357 accurately and precisely transfer reagents from any point on the worktable to assure reproducible, high quality products.

• Scale-up Synthesizer

Once lead compounds are identified or large scale synthesis is needed, the reactor assembly of the Titan 357 features a 500 mL reaction vessel that can be used to prepare larger quantities of a single peptide. The Titan 357 can prepare multi-gram quantities of peptides utilizing either Boc or Fmoc protocols.

FEATURES

• Special Reactor Assembly

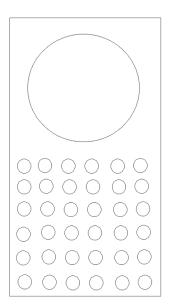
The reactor assembly of the Titan 357 has a 550 mL main reaction/mixing vessel and 36 parallel reaction vessels.

• Variable Speed Vortex Mixing

Variable speed vortex mixing produces thorough, efficient mixing in both the main reaction vessel and the parallel reaction vessels.

• Dual Robotic Arms

The Titan 357 utilizes one arm to accurately and precisely deliver amino acids and reagents. The second arm is equipped with a special silanized glass probe for transferring resin suspended in solvent, allowing for the split and combine protocols.







Titan 357 Features & Options

- Program-Controlled Variable Speed Vortex Mixer
- Inert Atmosphere
- 36-Well Reactor Capacity
- Monomer Rack including 125 mL Amino Acids Vessels
- Numerous Amino Acid and Reaction Vessel Configurations
- Temperature Controlled Amino Acid Vessels
- Optional 95 mL and 190 mL Amino Acid Vessels
- 550 mL Main Reactor Vessel
- Easy-to-Use Windows Software
- 48-Position Sample Rack
- Diluter/Syringe Dispensing System with Micro-liter Accuracy

SPECIFICATIONS

Width: 31.5 inches (80 cm) without computer

Depth: 22.75 inches (57.5 cm) **Height:** 25 inches (63.5 cm)

Weight: 220 pounds (100 kg) without computer

Chemistry: Boc or Fmoc, in-situ activation

Scale: 1 to 25 mmoles
Couplings: Single, double, etc.

Computer: HP Pentium-4, Windows XP™ Professional

Monitor: HP 17" LCD Flat Screen

Printer: HP Inkjet

Warranty: On site warranty





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