



CSBio

Research Scale Peptide Synthesizer Solutions









INNOVATIVE.

RELIABLE.

TRUSTED.

CSBio is a leading peptide and peptide synthesizer manufacturing company located in Silicon Valley in Menlo Park, California.

For over 25 years, CSBio has been providing automated peptide synthesizers and cGMP peptides to the global pharmaceutical community.



CSBio builds peptide synthesizers from research scale to commercial scale manufacturing and utilizes all these instruments in-house. Our company is the only peptide synthesizer manufacturer that also manufacturers peptides from mg to kg.

The CS136X is the most popular and purchased instrument in our portfolio. Customers routinely praise the individual customization of their system that perfectly fits their needs. The CSBio II is ideal for those looking to start automated synthesis in their lab. The 136M delivers on high throughput synthesis that specialized labs desire.



The engineering team at CSBio takes meticulous care to ensure our instruments are designed and manufactured to the highest specifications. We strive to uphold this standard across all designs, as well as in the selection of the highest quality components and materials for our products.

The CS136X is our most robust and flexible research scale peptide synthesizer, used for R&D, process development, and small-scale manufacturing. The instrument can be found in large pharmaceutical companies and universities across the globe. With most CSBio systems built to order, our synthesizers can be customized to the user's specific needs.

Reliability

CSBio has more synthesizers running over 10 years in the field than any other manufacturer; with 8 of the top 10 pharma companies in the world utilizing CSBio instruments. Many of our instruments in the field have been operational for 15+ years requiring little to no service. Our instruments are constructed with high quality components, feature peptide knowledge enabled integration and are designed for ease of use, as well as ease of repair.

Competitively Priced

Simplicity in design is difficult to achieve. With over 25 years of experience in the industry, CSBio has been able to achieve a simple and economical, yet extremely effective and reliable design for research scale peptide synthesizers. This allows us to pass these savings directly down to our customers, so they can start up their lab at a lower cost and keep it running for years. Unlike competitors, we prioritize our efforts on the products, not on marketing fluff.

Fast Synthesis with Intuitive Software

Our software and user interface is the most flexible on the market and has been optimized by our inhouse chemists who use our instruments daily to synthesize peptides in our R&D and cGMP facilities. CSBio peptide synthesizers operate using the same software across all peptide synthesizers scale up to pilot and commercial scale easy.



Synthesizers for Every User

Expand Your Synthesis Capabilities

Accelerate your research by introducing an automated peptide synthesizer to your lab. The affordable CSBio II will free you from waiting for your peptide orders and deliver the high purity peptides CSBio Instrumentation is known for.

No Experience Needed | CSBio II software lets users set up and run their peptide with a few clicks using preloaded protocols. Whether its for teaching or moving away from manual synthesis, the CSBio II is meant to be an understandable initiation into automated peptide synthesis.

Quick Lead Time and Setup | Labs can expect the system to arrive about 10 business days after order placement. Unboxing and setup takes less than 45 minutes and users will be able to run their first peptide the same day they receive the CSBio II.



CSBio II

Double Chamber Mixing | The CSBio II reaction vessel features patented double chamber nitrogen bubbling for complete solvent to resin contact and better results than standard nitrogen mixing.

Fully Automated Synthesis | With most peptide sequences in the 20 – 30 amino acid range, users working on the CSBio II can set up their sequence and return to a completed synthesis in the same day. Able to complete a synthesis of a 20-mer in less than five hours.

Heated Synthesis | Equipped with a heated reaction vessel and preheated solvent delivery to improve synthesis speeds.

Introductory Scale | Perfect for users looking to make R&D peptides. Start with as little as 150 mg of resin, produce anywhere from 50 – 500 mg of crude peptide per batch.

Complete Instrument Synthesis Control

Temperature Control up to 90°C | Using jacketed RV's the 136X employs uniform heating for controlled temperatures with no localized spikes or racemization. Circulating heated water around the reaction vessel during the entire synthesis, not just during coupling. This keeps the growing peptide chain extended, allowing for fast and high purity synthesis. Our system integrated circulator can provide consistent temperatures up to 90°C with the ability to turn on/off the circulator for specific AAs in the sequence.

Adjustable Scale | The 136X has a synthesis range of 0.1 – 4mmol. RV sizes can range from 20 – 200mL, translating to about 100mg - 7g of starting resin.

Flexible Chemistry | This system allows for unlimited automated couplings and is suitable for any type of chemistry, including Fmoc or TBoc, special amino acids as well as multiple activators including HBTU/DIEA and HoBT/DIC, or any other type of solid phase chemistry.

Complete Mixing | CSBio research scale instrument feature more resin to solvent interaction than vortex mixing, oscillation mixing, or microwave. The CS136X using patented 180° inversion mixing with nitrogen bubbling.



CS136X

High-Speed Synthesis

CSBio peptide synthesizers can consistently produce high purity peptides with time-efficient protocols.

Peptide Synthesis Capabilities Every 30 hours

	CSBio II*	CS1 3	CS136M**	
Reaction Vessels	1 RV	1 RV	2RV	6 RV
Total Peptides Synthesized	6	5	10	18

^{*(20-}mer, 0.2 mmol scale)



^{**(20-}mer, 0.75 mmol scale)

Designed with Chemists in Mind

Flexible User-Friendly Automated Synthesis

CSBio peptide synthesizers run on our in-house developed and proprietary CSPEPM software that is naturally intuitive for users, developed by chemists for chemists. Anything that can be done with manual synthesis, can be automated with our peptide synthesizers.



Our software gives the user the ability to:

- Synthesize unlimited automated couplings.
- Build their own step by step protocol or use one of our standard protocols.
- Couple specific AA with different activators in the same sequence.
- The option to cap or double/triple couple individual AA in the sequence.

Custom Options

High Throughput; Multiple Synthesizers in 1 | The 136X can have up to 3 functional RVs, the 136M comes standard with 6 functional RVs. This can exponentially increase the output of the lab.

Increased Capacity | We can equip your synthesizer with additional amino acid or solvent bottles. We can also adjust the size of the solvent bottles upon request.

UV Monitoring | Constant detritylation detection to verify deprotection of the amino acids.

GMP Compatible | An upgraded version of the software is compliant to 21 CFR part 11 for GMP manufacturing. As required, we also provide Installation/Operation Qualification (IQ/OQ) for the system.



CS136M

Choosing Your Peptide Synthesizer

	Batch Range	Starting Resin	RV Size	Max RV	Amino Acids	Reagent Bottles	Custom Options
CSBio II	0.1 -0.2 mmol	150 – 500 mg	15 mL	1 x 15 mL	30 x 5 mL	3	No
CS136X	0.2 – 4 mmol	200 mg – 8 g	20 - 200 mL	3 x 100 mL	22 x 100 mL	9	Yes
CS136M	0.2 – 4 mmol	200 mg – 3 g	20 - 100 mL	6 x 100 mL	24 x 100 mL	9	Yes

Cleavage and Precipitation

The peptide will need to be cleaved from the resin after synthesis in order to prepare for purification. CSBio has helped many users who are building out their first lab whether it be at a university, biotech or pharmaceutical company., we can provide solutions to supplement your current lab needs.

We offer a Cleavage Kit Package including:

- Shaker table
- Centrifuge
- Filtering Accessories
- And more!





GET IN TOUCH

