



Peptide Synthesis

At BioDuro, we leverage decades of experience and expertise in peptide chemistry to deliver high-quality peptide, from milligram to gram scales. Our state-of-the-art facilities, including a dedicated $1,500 \, \text{m}^2$ peptide synthesis center in Beijing, are equipped with top-class instruments and supported by a team of 100+ experienced chemists.

Peptide Synthesis Expertise

Our broad peptide synthesis capabilities support a variety of peptide catalogs including linear, cyclic, modified, and conjugated peptides.

Linear Peptide	Cyclic/ Macrocyclic Peptide	
Length up to $70\mathrm{amino}$ acids, including hindered unnatural amino acids	Lactam cyclic peptide	
5-day turnaround for peptide with 40 amino acids	Thioether-cyclized peptide	
Versatile Salt Forms Available: including TFA, acetate, and HCI	Stapled peptide	
	Multiple disulfide bonds	
	Click peptide	
	Cyclic lipopeptide	

Modified Peptide	Special Peptide	Peptide Conjugate
Dye and fluorescent labels	Hydrophobic sequence	Metal chelating conjugate (RDC)
Glycosylation	Cell-penetrating peptide	Peptide drug conjugate (PDC)
Phosphorylation	PEGylated peptide	
N-terminal modification	Lipidation	
C-Terminal modification	Peptidomimetics	
	Peptoid	
	Depsipeptide	

Typical Peptide Delivery Cycle Time (<100 mg)

Peptide Length	Week 1	Week 2	Week 3	Week 4	Success Rate
<10 AAs	Delivered				>99%
10-20 AAs	Synthesis and purification	Delivered			>95%
20-30 AAs	Synthesis	Purification	Delivered		>95%
30-40 AAs	Synthesis	Synthesis and purification	Purification	Delivered	>95%
40-50 AAs	Synthesis	Synthesis and purification	Purification	Delivered	>90%

Products with Various Purity Available: >90%, >95%, >98%



Automatic Peptide Synthesizer

0.1- 0.2mmol 0.1-0.2mmol 0.1- 0.5mmol 0.2- 3mmol









PTI Symphony X

CEM MultiPep2

Tetras Volo

DL-PSI-286

24 channels

48 channels

108 channels

3 channels

Case Studies in Macrocyclic Peptide Synthesis

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Target	PCSK9	I-66	IL-23
Amount	50mg	50mg	50mg
Steps	42	37	26
Timeline	5 weeks	7 weeks	5 weeks
Purity	98%	98%	98%
Structure			

Cutting-edge Kilogram-scale Peptide Scale-up Capabilities

- Solid-phase Peptide Synthesis (SPPS) up to 800 mmol, enabling efficient production of linear peptides, cyclic peptides, and various peptide drug conjugates (PDC)
- Liquid-phase Peptide Synthesis (LPPS) capabilities also available to support seamless scale-up and ensure efficient project delivery



Other In-house Capabilities to Empower Your Innovation

- Our Discovery Biology department provides a comprehensive suite of capabilities, including cell-free assays, cellular assays, and in vivo efficacy models, ensuring accurate and reliable data to support research
- Our DMPK department offers comprehensive services, rigorously screening candidates to optimize drug-like properties and accelerate development timelines
- Our Formulation department leverages expertise in enteric coating and permeation enhancement technologies to help enhance the bioavailability and efficacy of oral peptide delivery