

PEPTIDE CHEMISTRY

Our Services

The US-based peptide leadership and Shanghai-based peptide production teams excel in combining design and production efforts to drive projects forward based on client specified design goals and timelines.

US-based Peptide Offering

- Peptide design
- Lead optimization
- Client consultation on project scoping
- Feasibility study
- Process development and Scale up

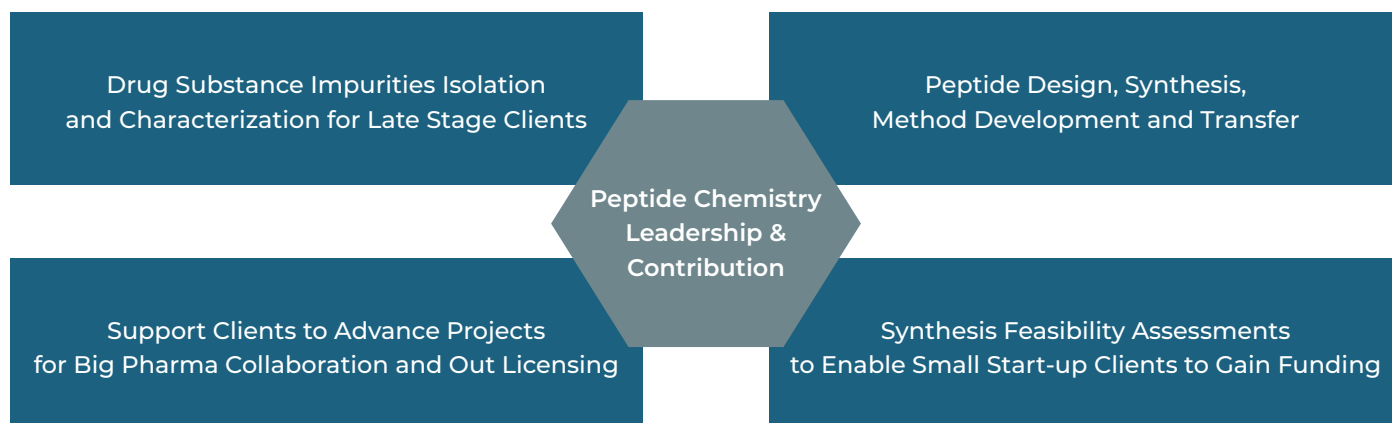
Scientific Experience

- 2 Biotage Syro II parallel peptide synthesizers to enable small and large library syntheses
- Macrocycles & macrocycle libraries
- Multiple disulfide bridged peptides
- Hydrocarbon bridge “stapled” peptides
- 1,2,3-Triazole cyclic or bridged peptides
- Novel linker synthesis & novel peptide backbone modifications

Shanghai-based Peptide Offering

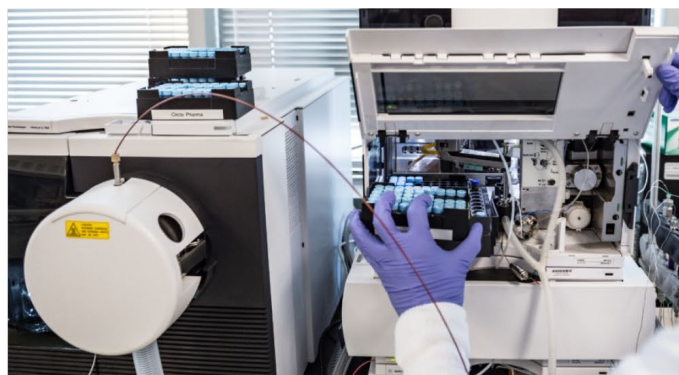
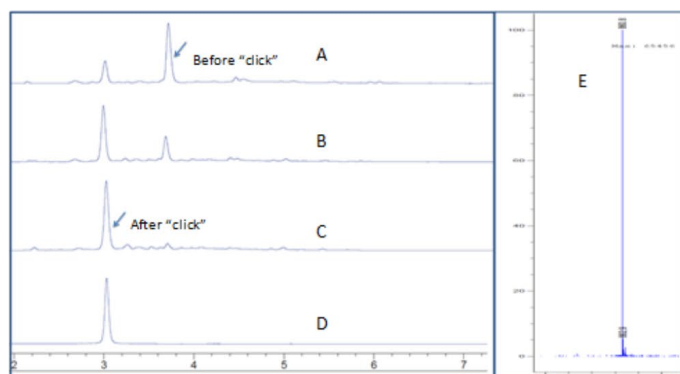
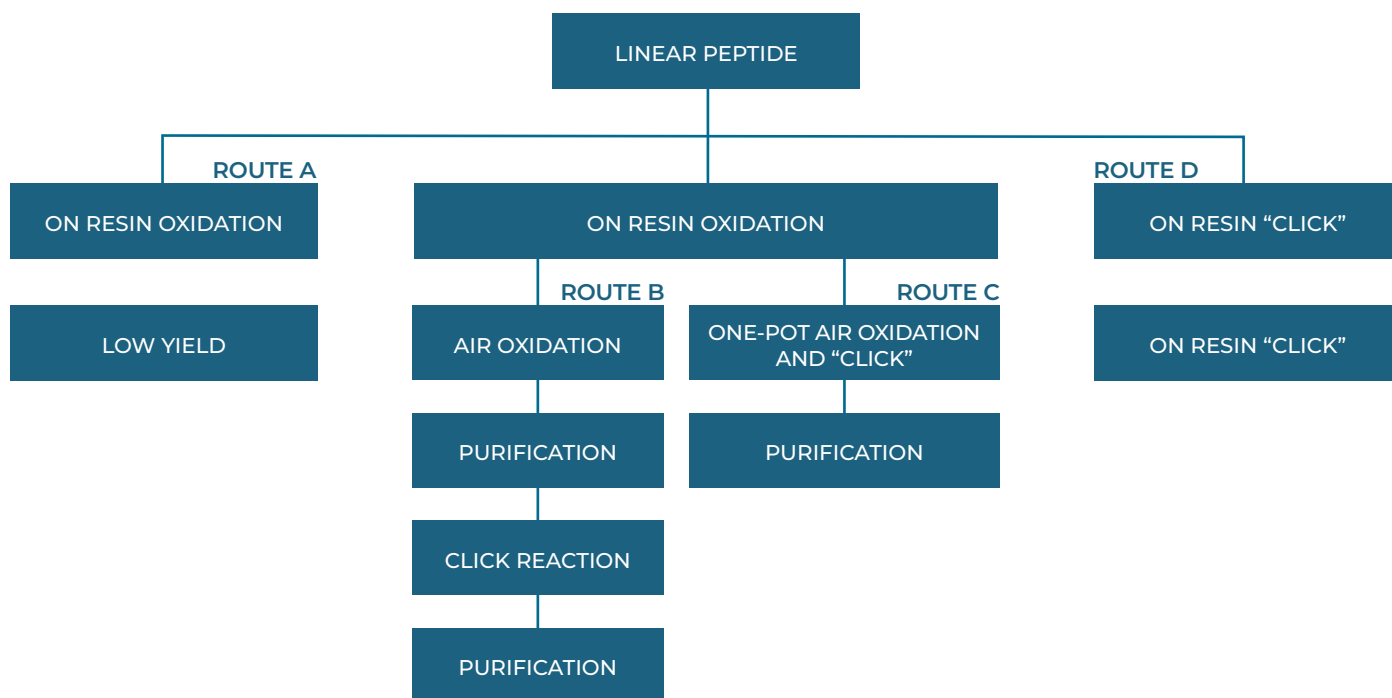
- Peptide synthesis scale: up to 10 g
- Unnatural amino acid building blocks synthesis scale: up to 20 g
- MW range: up to 100 amino acids
- Purity: 85 % – 99 % as requested
- Salt exchange
- QC: LCMS (identity) and RP-HPLC (purity)
- Peptide, water, salt content per request

- Unnatural amino acid building blocks and peptoid synthesis
- Labeled peptides
- Peptide conjugates
- Cyclic peptides
- Peptide libraries
- Native Chemical Ligation for small protein synthesis



A NOVEL One-Pot Synthesis Strategy for Bicyclic Peptide Assembly

Bicyclic peptides exhibit improved stability, higher potency, and bioavailability. They are considered a novel therapeutic class.



	Multi-Step	One-Pot Strategy
Synthesis Scale (mmole)	0.2	0.2
Final Peptide Purity (%)	97.0%	97.9%
Overall Yield (%)	19.0%	30.0%
Production Time (days)	13	8

Synthesis Process Optimization: the overall yield for the one-pot reaction was increased by 10 %, and the production time was at least one week shorter than the multi-step synthesis.