

Peptides & Peptidomimetics Synthesis Capabilities

Our Core Capabilities

❖ Full-Spectrum Peptide Chemistry Capabilities

- Custom synthesis of linear, cyclic, branched, and multifunctional peptides (mg–gram scale)
- Flexible synthesis platforms including SPPS, LPPS, and hybrid workflows (manual and automated)
- Macrocyclization strategies such as disulfide, thioether, amide, lactam, stapled, and click-based closures
- Advanced modifications including PEGylation, lipidation, biotinylation, and fluorophore conjugation, with use of unnatural amino acids and specialized linkers

❖ Automated Synthesis Platform: Speed with Precision

- Biotage Initiator + Alstra, CSBio, and Syro I for parallel peptide synthesis from mg to gram scale with hybrid manual–automated workflows

❖ Peptide Synthesis Workstation

- Integrated cleavage transfer, drying (Genevac), and lyophilization systems for efficient peptide processing

❖ Peptide Purification Capabilities

- Vortex Shaker 3020 (Tarsons) for homogeneous sample preparation
- Flash reverse-phase purification followed by prep HPLC and lyophilization for high-purity peptides

❖ **The SPPS Revolution: Streamlining Peptide Development**

- Scalable SPPS and SPPS–LPPS hybrid workflows enabling efficient synthesis of complex and long peptides

❖ **Nanoformulation & Peptide Encapsulation Capabilities**

- Sterile nanoformulation of lipopeptides with encapsulation analysis and full CoA (identity, efficiency, TFA, impurity profile)

❖ **Analytical & Purification Capabilities**

- LC–MS, UPLC, NMR, analytical HPLC, prep RP-HPLC, SFC, salt exchange, and lyophilization for purity and chirality control