

# Peptide Synthesis

Capabilities and Experience in Peptide Chemistry



## Unlocking the Potential of Peptide Synthesis

At o2h discovery, we are dedicated to advancing scientific research and drug discovery through exceptional peptide synthesis services. Our team specializes in producing a wide range of peptides, from milligram to gram scale, ensuring high-quality, customized solutions for your research needs.

## Our Peptide Platform

state-of-the-art facility for peptide purification and characterization.

Rapid peptide library generation for screening

Master in solid and solution phase synthesis for complex peptides.

Capable to generate up to 50-mer linear and cysteine-rich disulfide-bridged peptides

Experience in high-quality peptide delivery

Syro I synthesiser for simultaneous solid-phase synthesis of up to 24 peptides

## Peptide Modification

We offer a large variety of peptide modification including but not limited to the following

- ✓ Branched Peptides
- ✓ Acetylated Peptides
- ✓ Succinylated Peptide
- ✓ Cyclic Peptides
- ✓ Stapled Peptides
- ✓ PEGylated Peptides
- ✓ Citrullinated Peptides
- ✓ Phosphorylated Peptides
- ✓ Amidated Peptides
- ✓ Biotinylated Peptides

## Additional Services

Assay Development (SPR, FP, ChamelogK)

Chromatography (HPLC, TLC, GC, IC)

Chromatography with LC-MS/ESI

Spectroscopy (UV-Vis, IR, NMR)

Assay Development (SPR, FP, ChamelogK)

Titration (Acid-Base & Karl Fisher)

pH Adjustment and Amino Acid Analysis

Metallic Analysis (AAS, ICP, ICP-MS)

Counter Ion Exchange (TFA removal)

Solubility Testing

## Equipment

With a full range and optimal equipment ratio, and a dedicated analytical team working 24/6, we manage and achieve high 'speed' delivery

Equipment	Items	Reaction Technology	Items	Purification	Items
SPR	1	Automation	1	SPR	1
SPR	1	Automation	1	SPR	1
SPR	1	Automation	1	SPR	1
SPR	1	Automation	1	SPR	1
SPR	1	Automation	1	SPR	1
SPR	1	Automation	1	SPR	1
SPR	1	Automation	1	SPR	1
SPR	1	Automation	1	SPR	1
SPR	1	Automation	1	SPR	1
SPR	1	Automation	1	SPR	1

## Automated Peptide Synthesizer System

O2h discovery has added a fully automated parallel Peptide Synthesizer Syro I, with a one-arm pipetting robot to expand our chemistry synthesis capabilities. This system allows for multiple reactions to occur simultaneously, ensuring rapid delivery of peptide synthesis.

- One Robotic Arm
- Max no of peptides 96
- Inert gas blanket option
- Separate cleavage workstation
- Reactor vial size 2.5 10 and 20 mL
- In-situ and pre-activation both
- Vortex mixing (speed control knob)
- Amino Acid vessel standard 40 X 50 mL
- Reagent bottles 5 (2 x 500 mL: 3 x 200 ML)
- 2 digital Syringe pumps for liquid handling
- Conventional heating option (max 96 degC)
- Scale range 0.001 to 0.6 mmol (1 to 600 umol)

## Chemistry Case Studies: o2h discovery

Example synthesis of reference peptide compound prepared

