Peptide APIs
Custom Peptides
FMOC/Z – Building Blocks

NEULAND
WHERE OPPORTUNITY BECOMES REALITY

Our Peptide Synthesis Services

Synthetic Peptides are finding increasing use as therapeutics, diagnostics, for antibody production, and as tools for understanding biological processes. Neuland's peptide synthesis services include production of peptides from milligrams to multi-kilogram scale by standard sequential chemical peptide syntheses and segment condensation strategies.

Most peptides between five and sixty amino acids are produced by standard solid phase peptide synthesis (SPPS) procedures. Multiple kilos of shorter length (up to 9 amino acids) are produced by solution phase methods. For longer peptides, containing up to 120 amino acids, segment condensation and ligation techniques are employed.

Neuland has expertise in both solution phase and solid phase synthesis methodologies. We have recently produced 32 kg of a decapeptide for a US based company by solution phase segment condensation of two pentapeptide key starting materials. The N-terminal KSM utilized a pseudoproline at its C terminus. (Further details of this project can be found in 'Projects Realised'.)

Neuland has also developed a preparative HPLC technique which is 10 to 20x better in throughput compared to the standard preparative HPLC technique. This makes purification less laborious and economical due to increased output, lower purification related cost.

These aforementioned abilities enable Neuland to offer the highest quality peptide products at competitive prices. Please put us to work for you.

Synthesis of Peptide APIs, NCEs & Other Services

- cGMP manufacture of peptide APIs, NCEs, and impurities
- Route Scouting, Process development; optimization & validation; and impurity profiling
- Large scale manufacture of complex amino acids and Fmoc-building blocks such as Pseudoprolines, Isoacyl Peptides, Dmb-derivatives, *N*-Methyl amino acids, etc.

Drug Development Support

- Supply of material for clinical trials
- Scale up from lab to pilot to commercialisation

Analytical R&D

- Analytical method development and validation
- Impurity profiling and validation
- Stability studies
- Supply of analytical reference standards

Regulatory Support

- Filing DMF with the appropriate regulatory agencies

Neuland's Peptide World

From building blocks to commercial production of peptide APIs

Research	Aid in Drug Design and Analog Synthesis	Custom Process Developoment
Intermediates and Peptide Fragments	Novel Routes for Synthesis	Supply of protected Amino Acids and Building Blocks
Manufacturing Services	Scale up supply of Clinical Trial Material	Scale up from Lab to Pilot and Commercialization
Analytical and Regulatory Support	Analytical Method Development and Validation	Impurity Profiling, Validation Analytical Reference Standards
Generic Peptide API Manufacturing	cGMP Manufacturing of Peptide APIs with Regulatory Support	

We request our customers in North America & South America contact:
Mr. Shashank Mahashabde,
Tel: +1 (888)6179587
Cell: +1 (732) 666 7552
Email: shashankm@neulandlabs.com

We request our customers in Europe and RoW contact:
Mr. Partha Sarathi Pal
Tel: +91 40 3021 1600
Cell: +91 88869 41066
Email: parthapal@neulandlabs.com

We request our customers in Japan contact:
Dr. Yasukazu Ogino,
Tel: +81 3 3526 5171
Fax: +81 3 3526 5172
Email: yogino@neulandlabs.com

Core Expertise

- **Solution Phase Synthesis**
- **Solid Phase Synthesis**
- **Hybrid Technology for Complex Peptides**

Demonstrated expertise in the manufacture of peptide APIs (5 – 30 AAs) using solution phase and hybrid technologies.

Leuprolide, Octreotide and Eptifibatide (solution synthesis products). Evaluation samples available on request.

Your partner for development and cGMP manufacture of Fmoc building blocks (Isoacyl Dipeptides, *N*-Methyl amino acids, Azido and other high value amino acids.)

List of Building Blocks

- **Isoacyl Dipeptides**
- **Dmb Derivatives**
- **Hmb Derivatives**
- **Lysine Derivatives**
- ***N*-Methyl Amino acids**

Other Products

- **30- Pseudoprolines**