

# ORPEGEN Peptide Chemicals

**O**RPEGEN Peptide Chemicals, the daughter of ORPEGEN Pharma, continues the long history of its parent corporation as a supplier of amino acid derivatives for both the pharmaceutical industry and research labs worldwide.

ORPEGEN Peptide Chemicals is also a contract manufacturer for active pharmaceutical ingredients (APIs) with a focus on peptides and small molecules.

## Contract manufacturing of peptides and small molecules, and production of amino acid derivatives

ORPEGEN Peptide Chemicals has two main business units:

- **Contract development and production:** this unit focuses on the process development and contract manufacturing of peptides and small molecules; over the years we have successfully completed research projects ranging from the analysis of complex compound libraries to the ton-scale production of adsorber resin
- **Amino acid derivatives:** this unit specialises in the production of pharmaceutical-grade protected amino acid derivatives on an industrial scale

## Custom peptide synthesis

ORPEGEN has in-house pharmaceutical GMP production capacity and knowledge of generic synthetic peptide hormones (such as oxytocin, LHRH, somatostatin, eledoisin, MCD-peptide, calcitonin, bradykinin and nociceptin) and thymic peptides (such as Thymosin- $\alpha$ 1, Twin- $\alpha$ 1 and Thymosin- $\alpha$ 1 and antigenic determinants).

We cover lab-scale development to kilogram-scale GMP production, and we usually accompany our customers through preclinical development, clinical phases I to III and later routine GMP production. This capacity is based on the in-house manufacture of more than 350 amino acid derivatives at industrial scale.

### *Solid and solution phase peptide synthesis:*

- Large-scale SPPS (kilogram to milligram) on all common polymer supports
- Multiple kilogram synthesis of peptides in solution
- Optimized chemical strategies Fmoc-/tert-butyl, Boc-/Benzyl, Z-/tert-butyl, Ddz-/tert-butyl, based on ORPEGEN Pharma pharmaceutical-grade amino acid derivatives

### *Chemically modified peptides include:*

- Glycosylation
- Biotinylation
- Palmitoylation, PEGylation and others

## Bulk production of amino acid derivatives and preloaded resins

The flexibility in reactor capacity ensures bulk production of important protected amino acids, including:

Fmoc, Boc, Ddz and Z amino acids

Pre-loaded Wang resins and otherwise linked amino acids on polymer support

The manufacturing of amino acid derivatives is performed in glass or stainless-steel reactors and delivers up to 200kg per batch and each lot of amino acid derivatives is accompanied by a BSE/TSE risk-free certificate.

## Author profiles

**Dr. Mark Wehner** (COO) is Director of ORPEGEN. He made his PhD in 2001 on a new lead structure against Alzheimer's disease and has since then acquired experience in various fields within the chemical industry. This enables ORPEGEN to serve all sides of chemical and pharmaceutical requirements beside amino acid derivatives.



### Contact Details

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