A Novel Technology for Solution Phase Peptide Synthesis

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1. Introduction

Basic Technology
Chemical Synthesis in biphasic miscible organic solution

Example of Application
Product Separation in biphasic immiscible solvents

2. Application for peptide synthesis

Peptides
Hydrophobic tag

Polar solvent

Products

Fragment synthesis
Up to equimolar reactions

Bridge formation
Varied modifications

Peptide™ provides new peptide scaffolds with artificial bridge which is;

1. introducing other functional moiety into peptide’s backbone as well as controlling structural constraint of peptides
2. as a similar approach to medicinal chemistry
3. with a unique liquid phase synthesis method
4. applicable to peptide therapeutics, delivery motives, and diagnostics

3. Peptune™ (commercially available product) approach

Introducing a new bridge chemistry with linker function to introduce steric constraint

Functional moiety can be appended on bridgehead position in addition N, C terminal position

4. Patent status & Patent owner contact

Patent license is available.
Patent No. : 3538672 (JP) and others
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Peptune patent filed in worldwide by JITSUBO Co., Ltd., a Japanese licensee of JST for the basic patent and also available for licensing.