Japanese company is seeking EU partners for their oligonucleotide related products under commercial agency, distribution services, or manufacturing agreements.

Summary

Profile type
Business Offer

Company's country
Japan

POD reference
BOJP20221019003

Profile status
PUBLISHED

Type of partnership
Outsourcing agreement
Commercial agreement
Supplier agreement

Targeted countries
• World

Contact Person
Alessandro PERNA

Term of validity
19 Oct 2022
18 Oct 2024

Last update
13 Oct 2023

General Information

Short summary

This Japanese company has an oligonucleotide synthesis technology which was developed based on their proprietary raw materials. They seek EU partners who can help them represent, distribute, and manufacture products produced with this synthesis technology. The advantage is that they resolved many issues the conventional oligonucleotide synthesis methods had. They can be applied widely in both the pharma industry and academia under distribution, commercial agency, and manufacturing agreements.

Full description

The Japanese company was founded in 2015 and is offering their high purity oligonucleotides to potential EU partners. They have delivered drug substance candidates and intermediates to overseas pharmaceutical companies through a trading company. Their products were realized thanks to their oligonucleotide synthesis technology which is based on the companies' proprietary raw materials; they offer high purity oligonucleotides in weights ranging from milligrams to tons. Their offerings include:

- Contract manufacturing of their solid-phase synthesis
- Sales of their proprietary raw materials

Their proprietary raw materials can significantly shorten the oligonucleotides API (Active Pharmaceutical Ingredient) synthesis process and also produce high-quality oligonucleotides APIs with almost no impurities.

The difficult sequences required for solid-phase synthesis, such as poly G sequences, can be skipped through the use of the companies' technology. It also shortens the manufacturing process and reduces the amount of necessary documentation. Furthermore, their stereo-controlled proprietary raw materials make it possible to produce diastereomers in a single state. Positive benefits are that this allows for a significant reduction in the number of nucleotides used for synthesis as well as the production cost.

The companies' proprietary raw materials and liquid-phase synthesis technologies are currently being applied in the pharmaceutical industry. Their main applications are to counteract issues that conventional oligonucleotide synthesis methods have, such as their high price, low purity, and low productivity. They also provide high-quality and affordable primers and probes for genetic testing, leading to more accurate test results

The company is seeking distribution partners, commercial agents, and CMOs (Contract Manufacturing Organizations) for contract manufacturing of their solid-phase synthesis. They can provide their products to distributors or agency partners, who are then expected to supply their products to potential customers. The company is also open to long-term direct sales based on customer needs. Finally, the company is open to engage in a manufacturing agreement where CMOs produce their materials. They can provide partners with promotional materials in English. If necessary, the company will be able to provide remote support as well as onsite visits.

Advantages and innovations

The Japanese companies' proprietary raw materials can significantly shorten the oligonucleotides synthesis process compared to the synthesis process with conventional raw materials.

The other advantages include the following:

- Their proprietary raw materials make it possible to produce high-quality oligonucleotides with almost no impurities (1-2 bases shorter than the target length), which is not possible in conventional synthetic methods using monomers.
- The use of their proprietary raw materials makes it possible to skip the difficult sequences on solid-phase synthesis. For example, you are able to skip poly G sequences by using their proprietary raw materials.
- By using their proprietary raw materials, the manufacturing steps (number of processes) can be shortened.
- As a result, the burden of documentation related to GMP (Good Manufacturing Practice) can be reduced.
- Their stereo-controlled proprietary raw materials make it possible to produce diastereomers (originated from chirality on the phosphorus atom) in a single state. In conventional solid phase synthesis, the diastereomers are produced as a mixture.
-The loss of nucleotides used for synthesis can be reduced to ≤1/10 compared to conventional solid-phase synthesis methods using monomers.
-Production cost can be significantly reduced, especially when compared to the use of expensive modified nucleotides

When producing oligonucleotides with their proprietary raw materials and flow system, it is possible to achieve at a competitive price:
- Purity: more than 98% (conventional solid phase synthesis is about 90%)
- Production scale (one batch): tons (conventional solid phase synthesis is about 20 kg)

Technical specification or expertise sought

Stage of development

Sustainable Development goals

• **Not relevant**

IPR Status

No IPR applied

Partner Sought

Expected role of the partner

The company is seeking partners such as distributors, agents, and CMOs for contract manufacturing by solid-phase synthesis. Potential customers for the company are pharmaceutical companies, life science start-ups developing oligonucleotide therapeutics, oligonucleotide CMOs, and PCR kit manufacturers.

They also seek to collaborate with academic institutes which do research with oligonucleotides. The company is happy to offer their oligonucleotides to academic researchers.

They expect their partners to play the following roles:

- Marketing and sales of their products
- Promotion of the advantages of using their proprietary raw materials in solid phase synthesis.

Type of partnership

Outsourcing agreement

Commercial agreement

Supplier agreement

Type and size of the partner

- **SME 11-49**
- **Other**
- **Big company**
- **SME <=10**
- **University**
- **SME 50 - 249**
- **R&D Institution**

Dissemination

Technology keywords

Market keywords

- **05007002 - Pharmaceuticals/fine chemicals**

Targeted countries

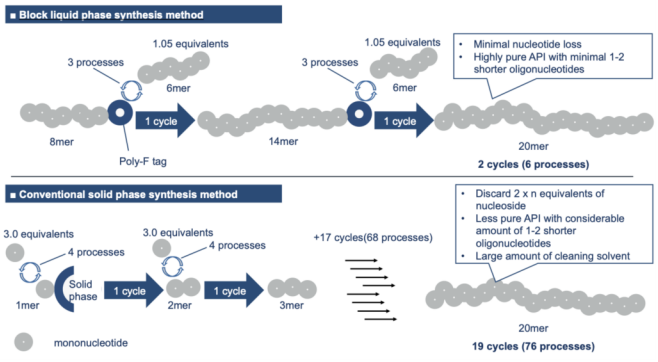
- **World**

Sector groups involved

- **Energy-Intensive Industries**

Media

Images



Liquid-phase synthesis.png