Hongene Biotech

Oligo Synthesis Using Enzymatic Ligation Technique

Traditional oligonucleotide synthesis based on phosphoramidite chemistry suffers from limited yield, purity, and consistency when the oligo length increases. Here, we present Hongene's enzymatic ligation technique combined with blockmer sunthesis, a promising solution with higher purity and cost-efficiency.

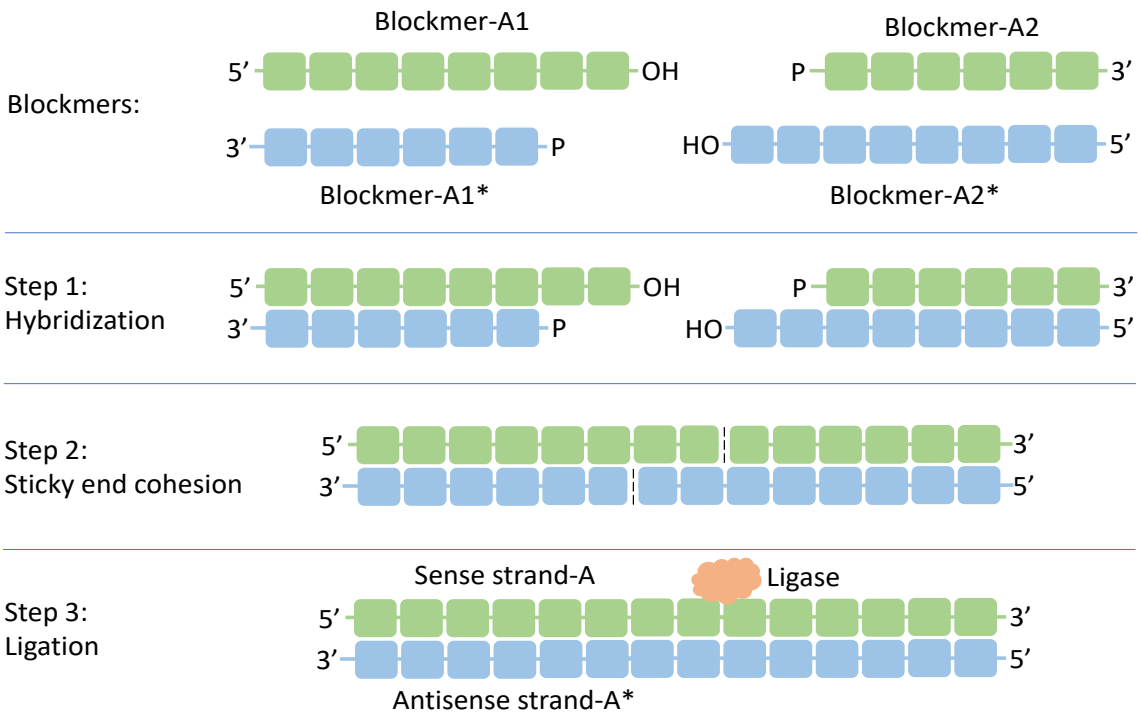

Figure 1. Scheme of enzymatic ligation techinque

How It Works:

To synthesize a full-length product (FLP), enzymatic ligation technique uses Hongene's engineered ligase to join multiple blockmers (Figure 1). Such synthesis processes can:

- **Minimize the ligation errors**
- **Provide higher flexibility in oligo design**
- **Increase the FLP yield**

Applications:

- siRNA
- ASO
- tRNA
- sgRNA for CRISPR/Cas9

Why Choose Hongene's Technique?

- **Higher purity:** Our technique provides industry-leading purity.
- **Minimized impurity:** Our technique minimizes the presence of undesired by-product.
- **Enhanced cost-efficiency:** Our technique enhances the FLP yield, reduces waste, and simplifies purification.
- **Scalability:** Our technique is compatible with small-scale experiments and large-scale production.

Bring your RNA to life

State-of-the-art Facility

Hongene has a comprehensive GMP oligonucleotide production line that can support a project from a small scale to a commercial scale.

Reliable Source Guarantee

The key synthetic raw materials of oligo synthesis are produced in-house to guarantee reliable and consistent product quality from the source.

Custom Solutions

We offer tailored oligo designs to meet specific project needs, from basic sequences to complex multi-part constructs.

Experienced Support

Our team of scientists is ready to assist with technical advice, project planning, and troubleshooting.

Contact Us Today!

Get in touch to discuss your project requirements and receive a personalized quote.

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