

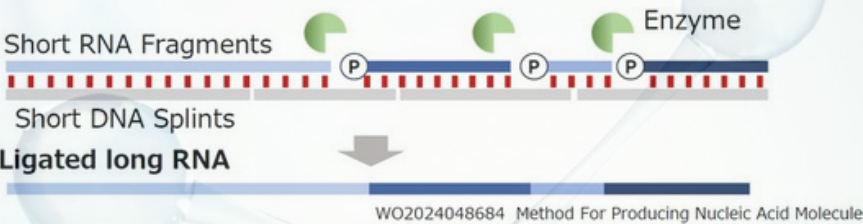
# ENZYMATIC RNA PRODUCTION



# LONG CHAIN RNA PRODUCTION

Over 600 mer RNA production  
with chemical modification  
**Summary of Production**

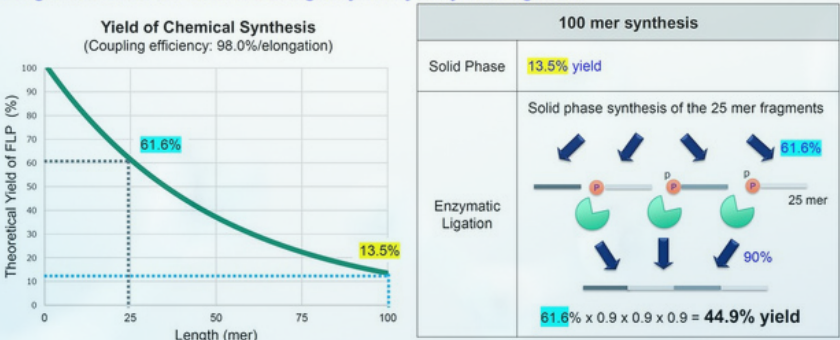
Concept: To obtain long chain RNAs in high yield & quality



- Providing long RNAs such as sgRNA and pre-miRNA
- ✓ With chemical modification (2'-F, 2'-MOE, LNA etc.)
  - ✓ For analytical standard etc.

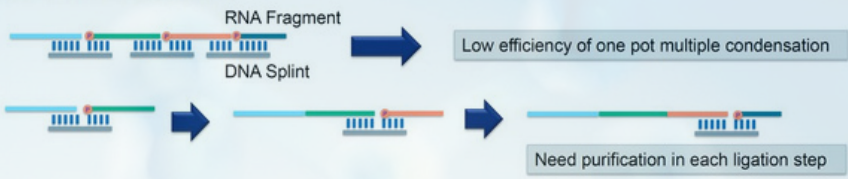
## Introduction: Chemical Synthesis vs Enzymatic Ligation

Long chain RNAs are obtained in higher yield by enzymatic ligation.



Conventional Ligation Methods of Long RNA Production from Fragments

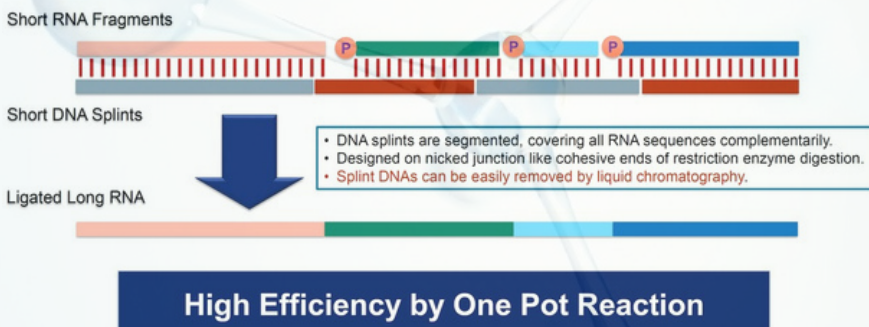
Conventional Method-1



Conventional Method-2

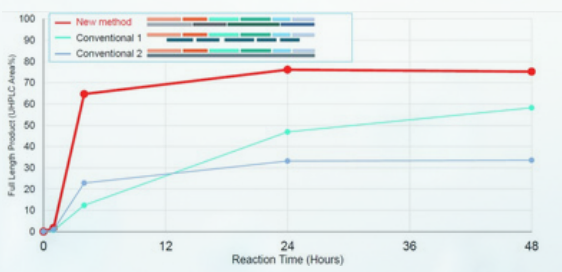


New Method of Long RNA Production from Fragments

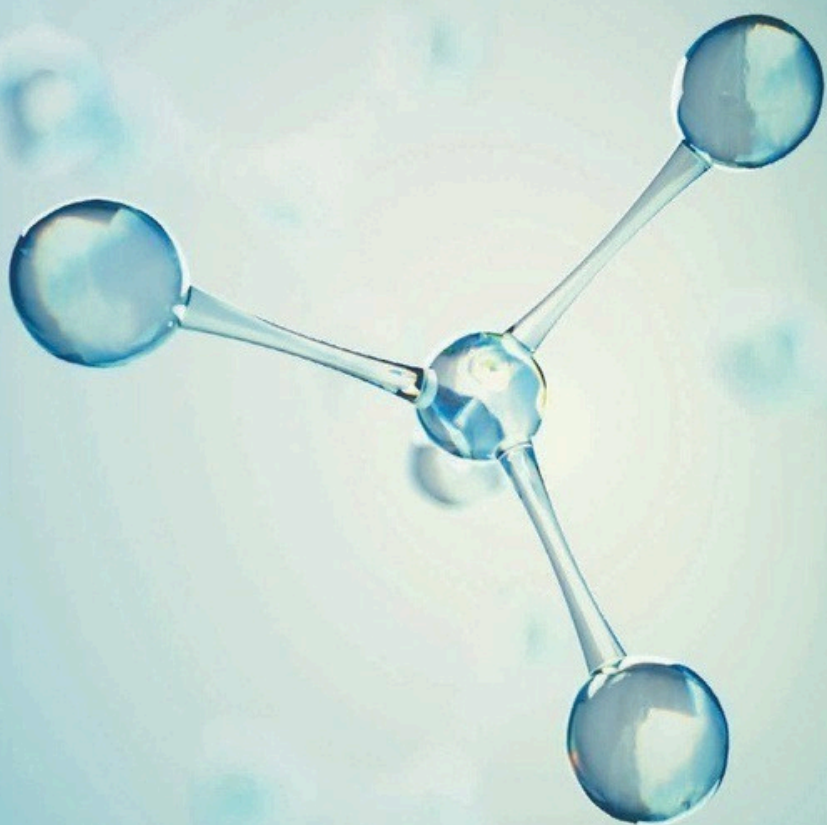


WO2024048684 Method For Producing Nucleic Acid Molecule

100 mer ssRNA Synthesis: UHPLC Analysis of the Products



This new method for multiple ligation on long RNA production is superior to conventional methods



 **SPE**

Summit Pharmaceuticals Europe