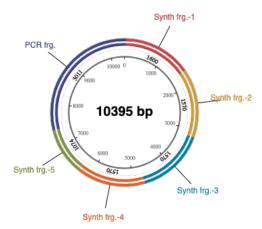
Component Fragments

| Name | Length | Produced by | 5' End | 3' End |
|------------|--------|-------------|-------------------|-------------------|
| Synth frg1 | 1600 | Synthetic | | |
| Synth frg2 | 1600 | Synthetic | | |
| Synth frg3 | 1600 | Synthetic | | |
| Synth frg4 | 1600 | Synthetic | | |
| Synth frg5 | 1104 | Synthetic | | |
| PCR frg. | 3071 | PCR | Fwd Primer (auto) | Rev Primer (auto) |



Notes

- For assemblies of 4 or more fragments, we recommend using overlaps of at least 25 bp when using NEBuilder.
- A 60 minute reaction is recommended for the assembly of more than 3 fragments.

Required oligos

| Name | Primer 5' (overlap/spacer/ANNEAL) 3' | Len | %GC | 3' %GC | 3' Tm | 3' Ta |
|------------|--------------------------------------|-----|-----|--------|-------|-------|
| PCR frgfwd | AGATTTATCAGCAATAAACCAGC | 23 | 35 | 35 | 60.3 | 61.3 |
| PCR frgrev | TTGGTTTGTGCCAGGTTTC | 19 | 47 | 47 | 63.4 | 61.3 |

Build Settings

| Property | Value #E5520 NEBuilder HiFi DNA Assembly Cloning Kit | | | |
|--------------------|--|--|--|--|
| Product/Kit | | | | |
| Minimum Overlap | 20 nt | | | |
| Minimum Overlap Tm | 48 °C | | | |
| Circularize | Yes | | | |
| PCR Polymerase/Kit | Q5 High-Fidelity DNA Polymerase | | | |
| PCR Primer Conc. | 500 nM | | | |
| Min. Primer Length | 18 nt | | | |

Assembled Sequence

```
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                             10395 bp ds-DNA circular SYN 29-DEC-2021
#DEFINITION
             synthetic DNA
#ACCESSION
#VERSION
#KEYWORDS
             NEBuilder
#SOURCE
             synthetic DNA construct
# ORGANISM synthetic DNA construct
#REFERENCE
            1 (bases 1 to 10395)
  AUTHORS
  TITLE
             NEBuilder-generated Construct
 JOURNAL
             Exported 29-DEC-2021 from NEBuilder https://nebuilder.neb.com
#COMMENT
             NEBuilder-generated oligos (UPPERCASE = gene-specific, lowercase = overlap)
#COMMENT
             PCR frg._fwd: AGATTTATCAGCAATAAACCAGC
#COMMENT
             PCR frg._fwd 3'Tm: 60.3 3'Ta: 61.3
#COMMENT
             PCR frg._rev: TTGGTTTGTGCCAGGTTTC
#COMMENT
             PCR frg._rev 3'Tm: 63.4 3'Ta: 61.3
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#
      121 ttgctagage tatgccaggt ggaaaccatt ttagaggtca acaatgtacc tacgaatgcc
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#
      541 gatggtgtgt tcgactacta cactacaggt ttggttagca tatggtacca gacgaattat
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