

# Gene Fragments

Synthetic gene fragments are a simple and increasingly popular alternative to PCR-based cloning. Access to synthetic genes has been limited by cost, turnaround time, throughput, and quality.

Twist Bioscience gene fragments improve your cloning process by minimizing colony screening. This allows you to save time and money by dramatically reducing cloning and sequencing costs. Think bigger, design on a grander scale, and accelerate your discoveries.

## GENE FRAGMENT SPECS

- dsDNA
- 0.3 – 1.8 kb
- 100 ng – 1 µg per fragment
- 6 to 9 business day turnaround time
- 1:3000 average error rate

## KEY BENEFITS

### Screen Less, Discover More

- Low average error rate, 1:3000 bp
- Reduced cloning costs

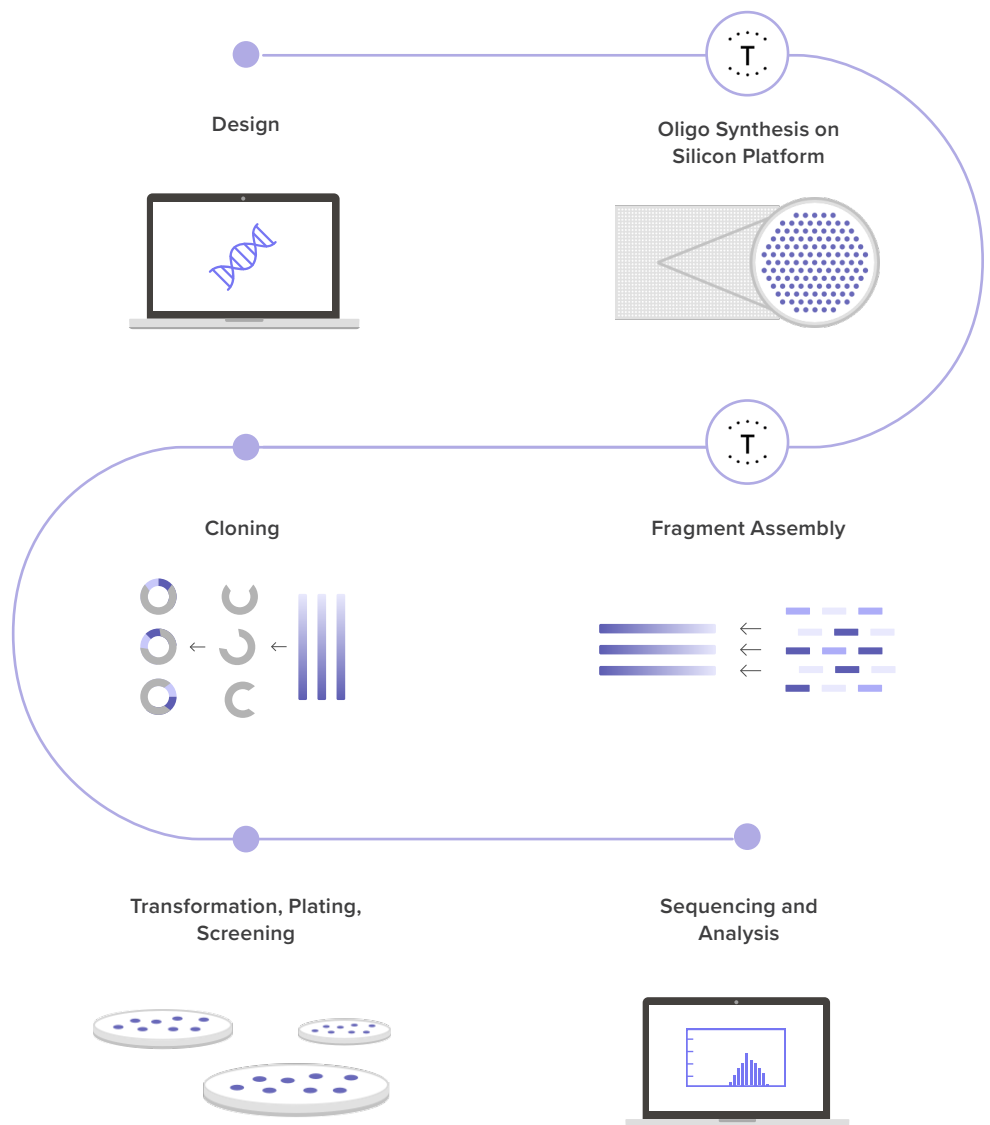
### Think Bigger on a Budget

- No upper order limit
- 7¢ per base, for every base

### Your Build, Your Way

- Assemble into larger genes or pathways
- Compatible with downstream cloning methods

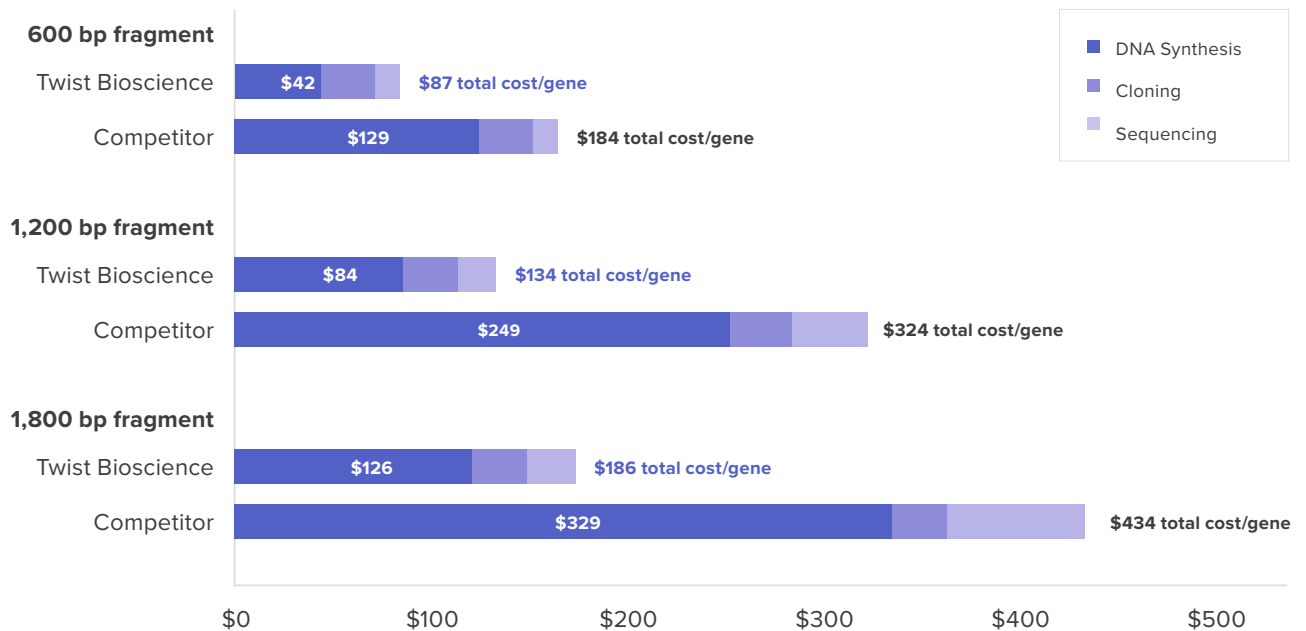
## Design. Build. Test.



## Screen Fewer Colonies to Obtain Perfect Clones with Twist Bioscience

Accurate fragment synthesis accelerates discovery. Twist Bioscience gene fragments enable you to build more constructs and minimize the time and cost of screening for perfect clones.

### Total Costs for Cloning Gene Fragments Synthesized by Twist Bioscience vs. Competitor



**COMPATIBLE CLONING METHODS**

- Restriction Enzyme Cloning
- Gateway® Cloning
- Golden Gate Cloning
- TOPO® Cloning

Comparison of total costs for DNA synthesis, cloning, and sequence verification of constructs built with gene fragments. Cloning cost is assumed to be \$30 per gene and sequencing cost is assumed to be \$5 per clone sequenced. Sequencing more clones of fragments synthesized by the competitor is required to obtain correct sequence with 99% confidence, increasing the total cost for each gene.

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