

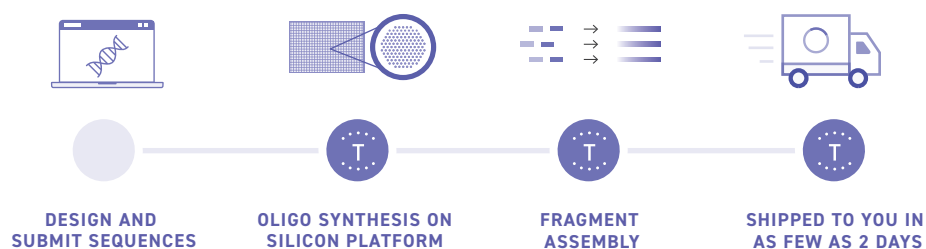
Twist Gene Fragments

Affordable, reliable, and fast gene synthesis made simple

DNA is the foundation of molecular biology experiments. Unfortunately, time and money are often wasted on experimenting with poor quality DNA. Our Gene Fragments are designed to keep DNA synthesis simple, while maintaining the exceptional synthesis quality and reliability that today's molecular biologists expect.

All of our Gene Fragments are synthesized with an average error rate of 1:7500, which reduces the amount of clones you have to screen, thereby improving cloning efficiency and success. Twist Gene Fragments can be delivered in various configurations, including your choice of tubes or plates, normalization, resuspension, or with the addition of amplification adapters, all within 2-4 business days.* Starting at 7¢ per base get the most out of your DNA for your budget regardless of length, scale or delivery format.

You provide your desired sequences, Twist does the rest!



SPECIFICATIONS

- Double-stranded DNA
- Length: 0.3 – 5.0 kb
- Scale: 100 ng – 1 µg
- Turnaround time: 2-4 business days
- Starting at 7¢ (USD) per bp

KEY BENEFITS

- Fast and reliable
- High quality with low price point
- Industry leading error rate
- Compatible with all downstream cloning methods
- Online platform that enables sequence optimization and order placement

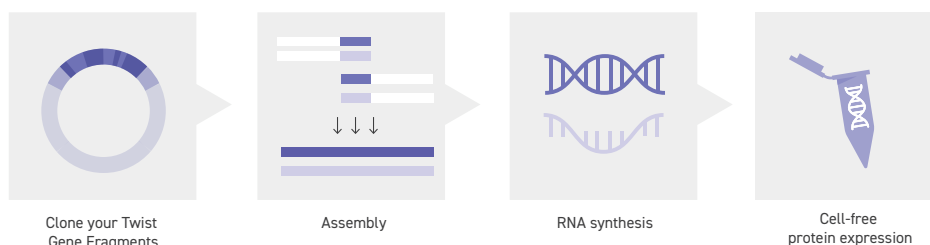
CUSTOMIZABLE

- No order limit
- Easily add amplification adapters
- Available options for tubes or plates, normalization, and resuspension

Easily integrated into a wide range of workflows

Our Gene Fragments begin as oligonucleotides synthesized on our semiconductor based silicon platform. The oligonucleotides are then annealed together, PCR amplified to produce a double stranded DNA fragment and error-corrected through an enzymatic reaction. The resulting Gene Fragment is universally compatible with various downstream cloning methods, allowing for seamless integration into a wide array of applications. Whether utilized in protein engineering, antibody discovery, pathway engineering, functional genomics, diagnostic assays, or other fields, the cloned end product or fragment can be readily employed to drive transformative outcomes.

DOWNSTREAM GENE FRAGMENT ASSEMBLY

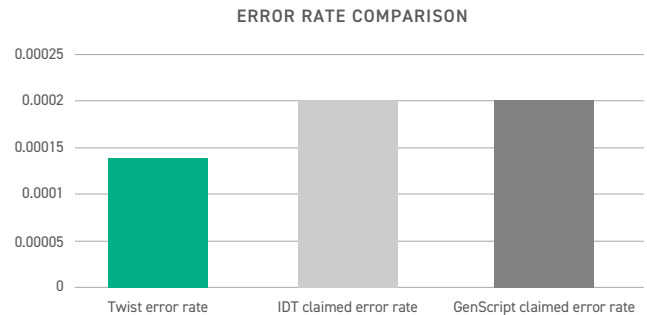


For Research Use Only. Not for use in diagnostic procedures.

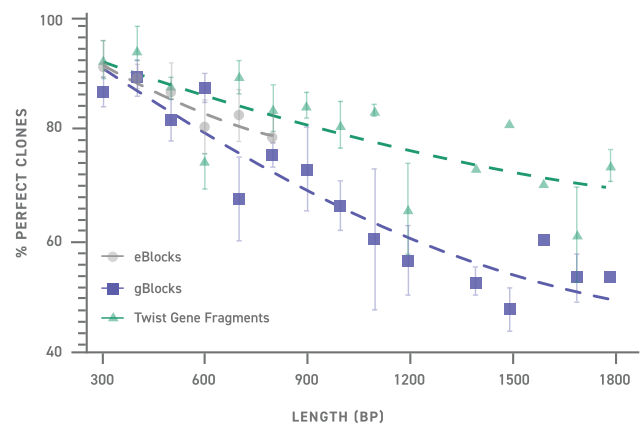
Proven quality, with our industry leading error rate

Twist Gene fragment demonstrates a 50% superior error rate compared to other major suppliers, as illustrated in the figure to the right. Low error rates translate into fewer colonies that need to be picked and screened to find your perfect gene.

To assess the quality of Twist Gene Fragments, identical dsDNA fragments with a wide variety of gene lengths from 300 bp to 1,800 bp, were ordered from both Twist and Integrated DNA Technologies, Inc. (IDT). Upon receipt of the fragments from each company, the DNA was cloned into pTwist Amp High Copy plasmid, transformed into DH10B-like cells, and plated onto LB Agar Plates with 100 µg/mL carbenicillin. After overnight incubation at 37° C, 20 colonies were selected for each gene and sequence-verified using Next-generation Sequencing. The graph bottom right captures a direct comparison of perfect clone percentages for three gene products. Data was generated using a set of 63 sequences to reflect the diversity of gene lengths required for various real-world synthetic biology applications. Our data highlights that Twist Gene Fragments consistently deliver the highest percentage of flawless clones, offering invaluable time and cost savings for your research endeavors.*



Twist error rate derived from customer orders, 2023.
Refer to GenScript and IDT for respective error rates.



*Twist time frame of 2-4 business days for Gene Fragments is based on internal data available as of June 2025. This timeframe refers to the typical processing and handling time within our facilities before your order is handed over to the shipping carrier

MADE EASY TO ORDER IN 3 STEPS

- 1 Register or login on our [eCommerce site](#)
- 2 Upload your sequences and configure your project with transparent real-time pricing
- 3 Twist will synthesize, verify, and ship your high quality genes fragments

YOU DESIGN IT, WE BUILD IT. Get in touch at sales@twistbioscience.com or learn more at twistbioscience.com

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