

# GENES & GENE FRAGMENTS

Genomic research starts here



Fast and dependable  
delivery times



Easy-to-use  
ordering system



Dedicated  
support



Flexible for a wide range  
of research applications  
and budgets

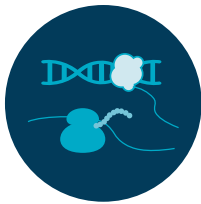
## OVER 30 YEARS OF INDUSTRY-LEADING MANUFACTURING KNOWLEDGE

IDT provides high-quality, high-fidelity, linear and clonal double-stranded DNA fragments and genes that are available for a variety of genomic research workflows and applications.

qPCR  
controls



In vitro  
transcription



CRISPR  
editing



Recombinant  
antibodies



Enzyme  
substrate



Gene  
construction



## GENE FRAGMENTS

IDT offers three types of double-stranded DNA fragments: eBlocks™, gBlocks™, and gBlocks HiFi Gene Fragments. These gene fragment products suit a variety of genomic research application needs and are constructed using the highest fidelity Ultramer™ Oligos with error correction measures that deliver high-quality abilities for cloning and gene assembly.

IDT Gene Fragments are compatible with many cloning and assembly kits and automation platforms that require double-stranded DNA as a starting material, allowing easy assembly of the desired construct sequence into your preferred cloning system—whether traditional cloning, Gibson Assembly™, Golden Gate, Gateway™, TOPO™/TA cloning, blunt-end cloning, or others. Rigorous quality control and sequence verification of IDT Gene Fragments ensure that most recombinant colonies obtained from cloning each IDT Gene Fragment will contain the desired insert.

## gBLOCKS GENE FRAGMENT LIBRARIES

IDT Gene Fragments can be produced with variable bases (N, K, and more) to generate sequence diversity. Up to 18 sequential variable bases can be incorporated into 500 bp or shorter gBlocks Gene Fragments.

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

> [WWW.IDTDNA.COM](http://WWW.IDTDNA.COM)

## CUSTOM GENE SYNTHESIS

MiniGenes™ and Genes are NGS-sequence verified, circular double-stranded DNA in a plasmid. DNA sequences 25 bp to 5 kb or longer are provided with IDT's in-house cloning vectors, or another plasmid vector of your choice, without additional cloning fees. Plasmids are delivered dry and ready-to-use. All orders will be supplied with a QC report.

## PRODUCT SUMMARY

	eBlocks Gene Fragments	gBlocks Gene Fragments	gBlocks HiFi Gene Fragments	Custom gene synthesis
Category	Linear dsDNA fragment	Linear dsDNA fragment	Linear dsDNA fragment	dsDNA cloned in a plasmid
Available lengths (bp)	300–1500	125–3000	1000–3000	25–5000+
Median error rate	1:5000	1:5000	1:12,000	N/A*
Estimated shipping time (business days)	1–3	2–8**	6–10	8+
Yield	200 ng	250–1000 ng	1000 ng	4 µg
Format	Plate	Tube/Plate	Tube	Tube
Application	Screening and antibody discovery	Gene construction and controls	Pathway design and large constructs	Protein expression and large constructs

\* Clonal genes contain no mutations present above IDT's sequencer-noise threshold.

\*\* This estimated shipping time is for tubes only. Plates estimated ship date is 10–15 business days.

## DESIGN AND ORDERING TOOLS

IDT has built a suite of online tools to assist with your ordering needs:

- **Complexity Checker**—allows for easy ordering of gene and gene fragment products
- **Codon Optimization Tool**—converts DNA or protein sequence from one organism for expression in another
- **Synthetic Biology Order Status**—check your order in real-time
- **SciTools™ Web Tools**—dilution and resuspension calculators, OligoAnalyzer™ Tool for melting temperatures and secondary structures, etc.



## COMMITMENT TO SUSTAINABILITY

IDT has implemented sustainable manufacturing practices, which includes a reagent reuse program to further reduce hazardous wastes.

> FOR MORE INFORMATION, VISIT [WWW.IDTDNA.COM/GENES](http://WWW.IDTDNA.COM/GENES)

**For Research Use Only. Not for use in diagnostic procedures.** Unless otherwise agreed to in writing, IDT does not intend these products to be used in clinical applications and does not warrant their fitness or suitability for any clinical diagnostic use. Purchaser is solely responsible for all decisions regarding the use of these products and any associated regulatory or legal obligations.

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