

Bioneer
Healthier Future for
Humanity with
Genomic Technology

Gene Synthesis Service

Cost Effective, Fast Turnaround, 100% Sequence Guarantee

Gene synthesis is the most cost effective way to enhance your research. In as little as 3 weeks, you can have your gene cloned in hand and 100% sequence guaranteed.

Applications

Antibody Construction / Organism Production Optimization / Gene Construction / Protein Modification

Features and Benefits

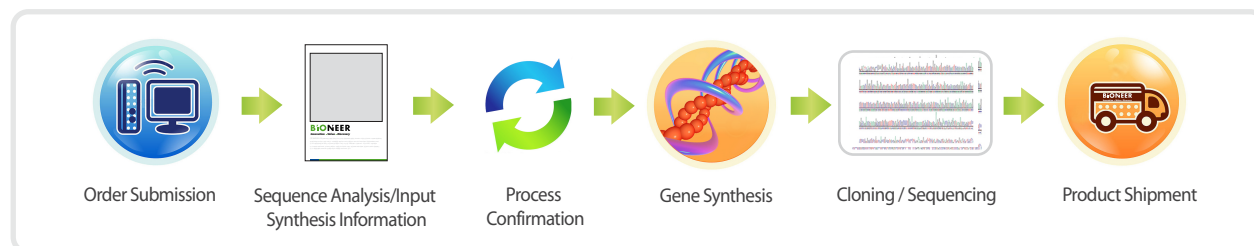
Save Time and Money: Bioneer's great pricing means that it can cost less to order a synthetic gene from us than to buy all the kits and reagents necessary to PCR.

Designer Genes: Genes optimized increase protein expression rates and enhance protein function. In addition our optimization can make previously un-clonable sections of DNA work easily.

Quality Results – Guaranteed Sequence: Each gene is cloned with the vector of your choice and then sequenced to give you the confidence that you want when working with your genes.

Other Services: Bioneer also offers Mutagenesis as well as Gene cloning and Gene to Protein services. Bioneer strives to provide the highest quality synthetic genes at a great price. Our goal is to always provide you with the best value for your research dollar.

Schematic of Synthesis



Gene Synthesis Service

Gene Synthesis Service Ordering Information		
Price	\$0.39/bp (Normal sequence/<3 kb)	
Minimum Synthesis Price	\$180.00	
Synthesis Period	1 ~ 1,500 bp	Average 7~12 working days
	1,501 ~ 3,000 bp	Average 14~21 working days
	3,001 bp ~	Inquire
Delivery Form	2 ~ 5 µg of lyophilized plasmid	*Low copy plasmid is 1 ~ 2 µg
Cloning Vector	pBHA	Basic vector
	Other	Add \$50.00 & 5 working days
Subcloning Price	\$100.00 (Gene Cloning Service)	
Additional Service	Produce high yield of plasmid DNA (\$100.00/100 µg)	
	*Low copy vector is exemption	

* Additional charges will apply for gene segments containing complexities such as high or low GC content, repeat sequences or homopolymeric runs. If any of your sequence is found to contain the above listed complexities, you will be contacted by our Gene Synthesis Specialist.

* When choosing the subcloning service with a commercial vector, a vector purchase cost will be billed separately.

* Synthesized genes will be sequenced. Only 100% sequence identity products will be shipped.

* If it's founded as gene which is toxic or inhibit the growth in *E. coli* cell system, customer can get PCR product or plasmid DNA which is form of mutant (Apply this regulation equally even if checking during the synthesis).

* If customer would like to order gene synthesis for protein expression & purification, customer can get the protein directly through *ExiProgen™* by Bioneer

* 50% charge of service bill for cancellation in 5 days.

80% charge of service bill for cancellation after 5 days.

Free of charge for cancellation after guarantee duration (Guarantee duration: gene synthesis period except delivery).

Vector Information

When using Bioneer's Gene Synthesis Service & Cloning Service, customers can select a vector according to their purpose, which makes them easy to get appropriate plasmid without paying for commercial vector purchase.

Vector Groupation	Vector Name	Feature and Antibiotics Marker
High Copy Vector	pBHA	pUC Origin, Ampicillin
	pBHK	pUC Origin, Kanamycin
	pBHC	pUC Origin, Chloramphenicol
	pBHZ	pUC Origin, Zeocin
Low Copy Vector	pBLA	p15A Origin, Ampicillin
	pBLK	p15A Origin, Kanamycin
	pBLC	p15A Origin, Chloramphenicol
	PBLZ	p15A Origin, Zeocin
In-vitro Transcription Vector	PBIC-A	T7 & SP6 Promoter, Ampicillin
Expression Vector	pBT7-N-His	T7 Promoter, N-terminal His-tag, Ampicillin
	pBT7-C-His	T7 Promoter, C-terminal His-tag, Ampicillin
	pBT7-N-GST	T7 Promoter, N-terminal GST-tag, Ampicillin
	pBT7-C-GST	T7 Promoter, C-terminal GST-tag, Ampicillin

Gene Cloning Service

Gene Cloning Service Ordering Information		
Accepted Materials	Plasmid, PCR product, Cultured <i>E. coli</i> cell	
Price	\$200.00/cloning (~ 1 kb insert, ~7 kb vector) * Possible to do cloning into the vector provided from Bioneer	
Additional Costs	With cultured cells	\$50.00
	Insert	\$50.00 / 500 bp (>1 kb insert)
	Vector	7 ~ 10 kb: \$100.00 10 kb ~ : inquire
Service Period	1 ~ 8 kb (vector+insert)	Average 5~10 working days
	8 ~ 11 kb (vector+insert)	Average 10~15 working days
	11 kb ~ (vector+insert)	Inquire
Additional Service	Produce high yield of plasmid DNA (\$100.00/100 µg)	
	*Low copy vector is exemption	
	Proceed with Gene Synthesis Service (\$100.00 discount)	

* Price & period can be increased based on the structure, quality of gene.

* In the cloning service, if customer requests to purchase the commercial vector by Bioneer, vector purchasing cost will be charged separately.

* If customer needs to send template DNA, please send it as plasmid DNA (over than 150~200 ng/µl, vol. 10 µl), purified PCR product (over than 50 ng/µl, vol. 10 µl).

Mutagenesis Service

The fastest and most cost effective way to construct a mutant gene for protein structure and function research or to increase enzyme function is to use our Mutagenesis Service combined with our Gene Synthesis Service. Site-directed mutation such as point mutation as well as deletion, insertion mutation services are available. For unsurpassed quality and value pricing, partner with Bioneer today!

Mutagenesis Service Ordering Information	
Accepted Materials	Plasmid, Cultured <i>E. coli</i> cell
Price	Inner mutation \$200.00/area (~1 kb, In less than continuous 20 bp)
	End mutation (5' or 3' end) \$100.00/area (~1 kb, In less than continuous 10 bp)
	Add \$100.00 as increasing each of mutagenesis areas (ex. Inner mutation 2 area: \$300.00)
Additional Costs	With cultured cells \$50.00
	\$50.00/500 bp (1 kb~ insert, 5 kb~: inquire)
Service Period	~ 1 kb Average 5~10 working days
	1 kb ~ 3 kb Average 10~15 working days
	3 kb ~ 5 kb Average 15~20 working days
	5 kb ~ Inquire
Additional Service	Produce high yield of plasmid DNA (\$100.00/100 µg)
	Proceed with Gene Synthesis Service (\$100.00 discount)

* Price & period can be increased based on the structure, quality of gene.

* If customer needs to send template DNA, please send it as plasmid DNA (over than 150~200 ng/µl, vol. 10 µl).

* If customer sends the wrong sample, 50% of total amount will be charged. So please make sure to send us as checking completely by your side.

* 50% charge of service bill for cancellation in 5 days. 80% charge of service bill for cancellation after 5 days

Codon Library Mutagenesis Service

Based on a long-standing experience of gene synthesis and mutagenesis techniques, Bioneer provides Codon Library Mutagenesis Service.

With the Codon Library Mutagenesis Service, we provide gene library by codon-based mutagenesis in response to codon bias of a species of your interest. You simply select the species where your genes will be expressed and specify the location of codon(s) in the gene sequence along with amino acid name(s) that each codon will designate. Bioneer's service team conducts codon mutation according to the codon usage in the species of your interest.

Codon Library Mutagenesis Service Ordering Information	
Accepted Materials	Plasmid, Cultured <i>E. coli</i> cell
Price	\$150.00/mutation site (~ 1 kb insert)
	We will provide you special discount for below case. Over 10 quantities: \$120.00/mutation site Over 50 quantities: \$100.00/mutation site
Additional Costs	With cultured cells \$ 50.00
	\$50.00/500 bp (1 kb~ insert, 5 kb~: inquire)
Service Period	~ 1 kb Average 5~10 working days
	1 kb ~ 3 kb Average 10~15 working days
	3 kb ~ 5 kb Average 15~20 working days
	5 kb ~ Inquire
Additional Service	Produce high yield of plasmid DNA (\$100.00/100 µg)
	Proceed with Gene Synthesis Service (\$100.00 discount)

* Mutation site units: the maximum continuous seven codons (DNA: maximum 21 bp).

* Additional charges will apply for gene segments containing complexities such as high or low GC content, repeat sequences or homopolymeric runs. If any of your sequence is found to contain the above listed complexities, you will be contacted by our Gene Synthesis Specialist.

* When sending us the template DNA, the minimum quality requirements are as follows;

For plasmid DNA, the concentration must be 150-200 ng/µl (at least 10 µl volume).

* If you send the wrong sample, 50% of the total cost will be charged additionally.

* Cancellations:

50% charge of service bill for cancellation in 5 days.

80% charge of service bill for cancellation after 5 days.

AccuGeneBlock Service

AccuGeneBlock Service provides synthesis of double strand DNA fragments (less than 1 kb) in as little as 3 days. It is a brand new service offered by Bioneer, a leader in Gene Synthesis. AccuGeneBlock service provides you with your gene fragments at a great price with fast turnaround time so you can use it easily and quickly in synthetic biology research.

AccuGeneBlock Service Ordering Information		
Price	<500 bp	\$95.00
	501~1,000 bp	\$95.00 (+ \$29.00/100 bp)
Synthesis Period	<500 bp	Average 3~5 working days
	501~1,000 bp	Average 4~6 working days
Delivery Form	500 ng ~ 1 µg of lyophilized PCR product	
Additional Service	Increased Quantity	5 µg/\$100.00
	Codon optimization	Free-of-Charge (via E-mail ordering only)

* AccuGeneBlock Service may not be available if the gene sequence contains high or low GC content, repetitive sequence, homo-polymeric runs, etc. In these instances please use Bioneer's Gene Synthesis Service.

* Available for gene of <1 kb in size.

* Double-Stranded DNA with a single 3' A overhang is provided as a default. Blunt-ended DNA is available upon request.

* Ordering through email is required for a gene with codon optimization. Other genes may be ordered Online.

* All of products will be delivered after checking the sequence.

Online Order

Please use our online order system for less-than-3 kb Gene Synthesis or AccuGeneBlock Service without additional request.

1. Click the banner to enter the online order page.
2. Click 'Go to online order page' and log-in home page.
3. Enter the required information and verify the estimates (Click to confirm the Quotation).
4. Click 'Add to Cart' and the final order.
5. Gene synthesis will beginning (Service will start the next day for orders placed after 11 PM [Pacific time]).

E-mail Order

Orders should be placed via email for: 1. genes larger than 3 kb; 2. AccuGeneBlock Service requiring Codon Optimization; 3. Codon Optimization, Mutagenesis, Codon Library Mutagenesis or Cloning Service.

1. Download the order form(s) from the link on Bioneer web site.
2. Complete the form and email to: geneorder@bioneer.com
3. We will review the order and send you service information (final quote and turnaround time) via email.
4. If you decide to go ahead with the service, please send us a confirmation email.
5. When the service is initiated we will send you an email alert.

(For the Cloning and Mutagenesis Services, the service begins when we receive your starting material.)

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