

Price Reference

Between

GENSCRIPT USA INC.

And

Pennsylvania state university

Confidential

GenScript Contact:

Ningning Shao

Sales Account Manager Ningning.Shao@genscript.com;7132490452

PSU Contact:

Nigel Deighton

Director of Research Instrumentation nxd20@psu.edu;8148654782

Effective Date: 01/01/2024 ~ 12/31/2025

GenScript is a leading research partner for fundamental life science research, translational biomedical research, and drug discovery and development. Specialized in providing customized solutions and pioneering products, GenScript has been consistently supporting clients with services of high quality and speed. GenScript's comprehensive service portfolio includes bio-reagent services, assay services and antibody drug discovery and development. Its renowned one-stop bio-reagent services encompass custom gene synthesis, molecular biology services, peptide synthesis, protein expression and purification, antibody development and production, as well as custom cell line development. At GenScript, we leverages the power of technology to accelerate life science research and drug discovery. We strive to make research easy and empower life science researchers worldwide to achieve more with less. With a global customer base, GenScript shares with you not only a goal-aligned business relationship but also a mission to further advance the frontier of biology for disease curing, energy saving and environment protection.



I. SERVICE LIST

1. Gene Synthesis and Molecular Biology Services

Service Standard Gene Synthesis	List Price Minimum charge (≤ 454bp): \$159/construct ≤ 3kb, \$0.35/bp	Timeline (business days) ≤ 1.5kb, 8-10 days 1.5-3kb, 10-12 days 3-5kb, 15-20 days	PSU Price Minimum charge (≤ 454bp): \$159/construct ≤1kb, \$0.21/bp 1-2kb, \$0.31/bp	Note
(SC1010)	3-5kb, \$0.40/bp 5-8kb, \$0.45/bp	5-6kb, 20-25 days 6-8kb, 23-30 days	2-3kb, \$0.32/bp 3-5kb, \$0.38/bp 3-8kb, \$0.40/bp	for difficult genes
FAST Gene Synthesis (SC1619)	≤ 454bp, \$159+\$0.30/bp ≤ 3kb, \$0.65/bp 3-5kb, \$0.75/bp	≤1.2kb, 7 days 1.2-2kb, 9 days 2-3kb, 11 days 3-5kb, 15 days	≤ 454bp, \$159+\$0.28/bp ≤ 3kb, \$0.60/bp 3-5kb, \$0.70/bp	Not applicable for complex genes
RUSH Gene Synthesis (SC1575)	≤ 454bp, \$159+\$0.99/bp; ≤ 4kb, \$1.34/bp	≤ 0.8 kb, 4 days 0.8-1.2kb, 5 days 1.2-2kb, 7 days 2-3kb, 8 days 3-4kb, 10 days	≤ 454bp, \$159+\$0.90/bp; ≤ 4kb, \$1.17/bp	Not applicable to complex genes; timeline for genes under 2kb is guaranteed.
Economy Gene Synthesis (SC1645)	Minimum charge (≤ 454bp): \$89/construct Easy gene: ≤ 3kb, \$0.19/bp 3-5kb, \$0.23/bp 5-8kb, \$0.29/bp Difficult gene: ≤ 3kb, \$0.23/bp 3-5kb, \$0.23/bp 5-8kb, \$0.35/bp	≤ 1.5kb,10-15 days 1.5-3kb, 15-20 days 3-6kb, 20-29 days 6-8kb, 35-44 days	same as list price	See Note 7 for details on difficulty



GenBrick [™]	8-15kb, \$0.45/bp		8-15kb,	Applicable for genes
Gene Synthesis	>15kb, quote	Starts from 23 days	\$0.40/bp	over 8kb, sequence
(SC1584)			>15kb, quote	subject to evaluation
Subcloning Bundle (SC1017)	Insert length ≤ 10kb, \$49 if vector is achieved or to- be archived ≤ 10kb, \$149 if vector is not archived and no to-be archived Cost for CloneEZ varies	2-5 days	same as list price	Must be bundled with gene synthesis (SC1010, SC1645, etc.). The vector for cloning can be plasmid previously synthesized by GenScript Non-standard non- restriction cloning results in CloneEZ variable pricing.
Subcloning (SC1625)	Insert length ≤ 3kb, \$149 3-6kb, \$199, 6-10kb, \$249 Cost for CloneEZ varies	≤ 3kb, 10-14 days 3-6kb, 14 + 3 per kb days 6-10kb, 14 + 3 per kb days	same as list price	Not required to be bundled with gene synthesis (SC1010, SC1645, etc.) Non-standard non- restriction cloning results in CloneEZ variable pricing.
Express Cloning (SC1691)	Insert length ≤ 8kb, \$49 Cost for CloneEZ varies	2 days	same as list price	Must be bundled with gene synthesis (SC1010, SC1645, etc.). Uses IP-free or default vectors only. Non-standard non- restriction cloning results in CloneEZ variable pricing.



				Must be bundled with
				gene synthesis
				(SC1010, SC1645,
				etc.). Use Customer
	Insert length			provided vectors
	≤ 8kb, \$49		Pot	archived with or to be
VectorArk Cloning		5 days	same as list	archived with
(SC1692)	Cost for CloneEZ varies		price	GenScript.
				Non-standard non-
		0		restriction cloning
				results in CloneEZ
				variable pricing
				For template from
				client,
				additional \$100 per kb
	Starts from \$295			for genes longer than 1
Customized Cloning		~14 days	same as list	kb
(SC1622)	Cost for CloneEZ varies	uays	price	
				Non-standard non-
				restriction cloning
				results in CloneEZ
				variable pricing.

GenTitan gene fragments

		Timeline		
Service	List Price	(business	Price	Note
		days)		
	\$0.07 with			
	Adapter			
	(minimum	5-7 BD	20% off	
	charge \$35			
	for <500 bp)			
GenTitan				
Gene				
fragments				



\$0.08 without			
Adapter			
(minimum	6-8 BD	20% off	
charge \$40			
for <500 bp)			

Mutagenesis, ORF Clones, and Precision Mutant Libraries

Express Mutagenesis bundled with gene synthesis (SC1441)	≤ 3kb, \$99/mutation; 3-8kb, \$99/mutation +\$100; >8kb, quote	≤8kb, 5 days >8kb, quote	7.5% off	One mutation is defined as any combination of base changes within a 30-base frame.
Mutagenesis from a template previously synthesized by GenScript (SC1626)	≤ 3kb, \$99/mutation; 3-8kb, \$99/mutation +\$100; >8kb, quote	Starts from 8 days	7.5% off	One mutation is defined as any combination of base changes within a 30-base frame.
Mutagenesis from customer-provided templates (SC1023)	≤ 1kb, \$169/mutation >1kb, Additional \$100 per extra kb	~ 10 days	7.5% off	One mutation is defined as any combination of base changes within a 30-base frame.
High Throughput Mutagenesis (SC1154)	\$50/mutation Template <10Kb Min order of 100 mutations	~3 weeks	same as list price	One mutation is defined as any combination of base changes within a 30-base frame.
GenEZ [™] ORF Clones (SC1200)	Starts from \$99 (in stock) or \$159 (on-demand)	Starts from 5 days (in stock) or 7 days (on-demand)	same as list price	See website for details
Mutation Library & HTP DNA Assembly Library Construction	Quote	Quote	Quote	See website for details

Plasmid Prep

	Research Grade	Industrial Grade	US Rush Grade
	Predominantly supercoiled,	90% Supercoil,	
Features	Optional animal-free	≤ 0.01 EU/µg Endotoxin,	< 0.1 EU/µg Endotoxin
		Optional animal-free	
Turnaround Time	Starting from 2 days	Starting from 2 days	1-3 days



	HT (10 μg)		\$29				
	ΗΤ (30 μg)		\$49				
	Midi (100 µg)	\$39	\$99	\$89			
	Maxi (200 µg)	\$69	\$139	\$89			
	Maxi (500 µg)	\$99	\$199	\$139			
	Mega (1 mg)	\$119	\$239	\$159			
Plasmid	Mega (2 mg)	\$149	\$279	\$199			
Preparation	Mega (5 mg)	\$279	\$419	Quote			
	Giga (10 mg)	\$419	\$679				
	(high copy)	(\$519 for template from	(\$849 for template from	Quote			
	(iligii copy)	customer)	customer)				
	Giga (10 mg)	\$649	\$1.099	Quote			
	(low copy)	ψυτυ	ψ1,000	Quote			
		\$599	\$1,099				
	20 mg (high copy)	(\$749 for template from	(\$1,299 for template from	Quote			
		customer)	customer)				
	20 mg (low copy)	\$1,099	\$1,799	Quote			
	Note: T	Note: Timeline shows additional days when bundled with gene synthesis and cloning.					
		For plasmid prep only, additional shipping time will apply.					
	Lar	ger quantities to gram scale ava	ailable, quote for price and turnar	ound time			
		PSU Discount:10	% off				

ITR guarantee service (SC2330)

Service	List Price	Timeline (CD)	Price	Note
ITR guarantee service	\$200	7	10% off	

PolyA guarantee service (SC2332)

Quantity	research/industrial listing price (High copy)	preclinical listing price (High copy)	research/industrial listing price (Low copy)	preclinical listing price (Low copy)	Add TAT (CD)
4ug(or cloning)	\$79	-	\$79	-	5
30ug	\$129	-	\$219	-	6



100ug	\$129	-	\$219	-	6
200ug	\$129	-	\$219	-	6
500ug	\$129	-	\$219	-	6
1mg	\$159	-	\$309	-	5
2mg	\$159	-	\$309	-	5
5mg	\$199	-	\$479	-	4
10mg	\$299	\$599	\$599	\$1199	4
20mg	\$399	\$659	\$799	\$1599	4
50mg	\$539	\$819	\$1080	\$1899	3
100mg	\$699	\$999	\$1400	\$2199	3
200mg	\$899	\$1299	\$1801	\$2699	3
500mg	\$2099	\$2399	\$4205	\$5399	3
1000mg	\$3999	\$4219	\$8011	\$10099	3
2000mg	\$7599	\$7999	\$15223	\$19899	3

Notes and Specifications:

1)GenScript default cloning vector is pUC57, without vector specification by the client, GenScript will clone synthesized genes into pUC57 at no charge.

2)Minimum charge may applied for gene synthesis service as indicated.

3)GenScript provides complimentary codon optimization using proprietary GenSmart Codon Optimization[™] tool upon client's request.

4)GenScript guarantees 100% sequencing accuracy for all gene synthesis products. Standard QC documentation includes sequencing data, alignment files, and certificate of analysis (COA). Vector NTI files available upon request. Additional QC services will result in additional QC documentation provided.

5)Express cloning vector list is available at: http://www.genscript.com/express-cloning-vector-list.html

6)Plasmid preparation service delivers plasmids with equal or more quantities than specified.

7)Gene synthesis difficulty will be evaluated on a gene by gene basis via GenScript proprietary algorithms. Extreme high and low GC, repetitive regions, inverted repeats, etc. require higher levels of customization in production process.



2. Oligo and Oligo Pools

1)Oligo Synthesis and Purification

Chemically synthesized DNA and RNA oligo pricing is calculated based on a matrix of attributes including (but not limited to): Amount, Length, Purification Method, Modifications, etc.

For short, simple, and small scale (<= 1umol) DNA or RNA oligo pricing please visitCustom DNA Oligo Synthesis Services (genscript.com) or Custom RNA Oligos, Antisense Oligonucleotides-GenScript.

For more complex and larger scale DNA or RNA oligo pricing please reach out to you sales representative.

2)Precise Synthetic Oligo Pools

Turnaround time is typically 1-2 weeks.

Legacy pools

Legacy	10-79 nt	80-109 nt	110-130 nt	131-150 nt	151-170 nt		
pools	10-7511	00-105 m	110-150 III	131-130 III	131-17011		
Up to 12,472							
oligos	\$1,600	\$1,800	\$2,000	\$2,200	\$2,400		
(SC1966-12)							
Up to 92,918							
oligos	\$4,000	\$4,500	\$5,000	\$5,500	\$6,000		
(SC1966-92)							
	Discount:10% off						

GenTitan High-Fidelity 92k (HiFi 92k) pool

HiFi 92k SC1966- HF92	10-79 nt	80-109 nt	110-130 nt	131-150 nt	151-170 nt
6k	\$1,540	\$1,760	\$1,980	\$2,180	\$2,400
12k	\$1,600	\$1,800	\$2,000	\$2,200	\$2,420
24k	\$2,200	\$2,420	\$2,640	\$2,970	\$3,300
36k	\$2,640	\$2,970	\$3,300	\$3,630	\$3,960



48k	\$3,080	\$3,410	\$3,740	\$4,180	\$4,620
60k	\$3,520	\$3,960	\$4,400	\$4,840	\$5,280
72k	\$3,960	\$4,400	\$4,840	\$5,390	\$5,940
92k	\$4,000	\$4,500	\$5,000	\$5,500	\$6,000
Discount:10% off					

GenTitan High-Density 8M (HD8M) pool

HD8M 1966- HD8M	20-120nt	121-150nt	151-170nt
180k	\$7,200	\$8,200	\$9,000
360k	\$9,800	\$11,000	\$12,000
540k	\$11,500	\$13,500	\$15,000
720k	\$14,500	\$16,000	\$17,500
1M	\$17,000	\$18,500	\$20,000
2M	\$22,000	\$23,500	\$25,000
3M	\$27,000	\$28,500	\$30,000
4M	\$31,600	\$33,300	\$35,000
5M	\$36,600	\$38,300	\$40,000
6M	\$41,600	\$43,300	\$45,000
7M	\$46,600	\$48,300	\$50,000
8M	\$51,600	\$53,300	\$55,000
	Discoun	t:10% off	

Notes and Specifications:

1)Oligo pool synthesis is based on proprietary semiconductor-based electrochemical oligo synthesis platform developed by CustomArray, Inc.

2)Two different chip capacities are offered: 12K chip-holds a maximum of 12472 unique oligos; 90K chip-holds a maximum of 92,918 unique oligos.

3)Inquire for oligos of 171-200 bases in length.



3. Peptide Synthesis

GenScript offers a range of peptide synthesis options from short to long (-200 AA) from small amount (mg) to large amount (Kg), and crude to high purity (>98%).

Peptides are priced based on length, amount, and purity and the price will vary between sequences. We offer a wide range of modifications including special amino acids, disulfide bridges, cyclization, etc.

Peptide pricing is also impacted by the request speed (aka prioritization) of your order and by the requirement to pool or not pool peptides.

Peptides can be quoted or ordered through your local Sales Representative or Technical Account Manager. Additionally simple peptides can be quoted or ordered directly from the following online resource.

https://www.genscript.com/quick_order/custom_peptide

Service/Part Number	Description	List Price	TAT (BD)	PSU Price
Custom Peptide	4-50 AA lengths optimal, up to 200 AA possible.	Price is determined on a per sequence basis.		450/ //
Synthesis (SC1208)	1-1000 mg optimal, up to Kg amounts possible.	Price = No. of AA * price/AA (varies depending on purity) + modification costs	10 BD	15% off
Fast Peptide Synthesis (SC1848)	Purified peptides w/ prioritized (faster) delivery.	Additional 25% price compared to	6 BD	15% off
Rush Peptide Synthesis (SC1845)	Crude peptides w/ prioritized (faster) delivery.	SC1208.	5 BD	15% off
Crude Peptide Library (SC1177)	5-25 AA per peptide lengths 1-20 mg per peptide amounts Purity is crude.	Price is determined per sequence and based on total number of peptides.	9-17 BD (5-15AA) 15-20 BD (16-25AA)	10% off
	>=24 peptides required per library			



Purified Peptide Library (SC1487)	5-25 AA per peptide lengths 1-4 mg per peptide amounts Purity varies from 70-98% >=24 peptides required per library	Price is determined per sequence and based on total number of peptides. Increasing purity requirements increase price (70-98% purity options)	15-20 BD	10% off
Crude Micro-scale Peptide Library (SC1695)	 5-20 AA per peptide lengths 0.2-0.5 mg per peptide amounts Purity is crude. >=24 peptides required per library 	Price is determined per sequence and based on total number of peptides.	15-20 BD	10% off
Purified Micro-scale Peptide Library (SC1696)	5-20 AA per peptide lengths 0.2-0.5 mg per peptide amounts Purity is >=70%. >=24 peptides required per library	Price is determined per sequence and based on total number of peptides.	15-20 BD	10% off
GMP peptide (SC1289)	neoantigen peptide, up to 35 AA, crude to >=98%, up to 150mg, over 30 modifications API peptide, up to 80 AA, >=95%, mg to kg, over 30 modifications	Price is determined per sequence and based on peptide amounts.	neoantigen peptide <30BD API peptide (consult PM)	10% off

Notes:

- 1. As an example, if you want 14 mg, Crude, 15AA peptide, your price will be approximately \$66.5 for Custom Peptide Synthesis (SC1208), \$83 for Rush Peptide Synthesis (SC1845).
- 2. Standard peptide deliverables include the following: lyophilized peptides aliquoted into individual vials, COA, MS spectra, HPLC chromatographs.
- 3. To see all the possible modifications (Azide, 5-FAM, etc.) please go here: https://www.genscript.com/peptide_modification.html
- 4. Additional options and add-ons (solubility testing, TFA removal, etc.) are also available for an additional cost. Please see here for a list of some of these options: https://www.genscript.com/accupep_quality.html
- 5. Other more specialized peptide services can be found here: https://www.genscript.com/peptide-services.html



4. Protein Expression

Service	Description	Price and Timeline	Price	
Service	Description	(business days)	FILE	
	Bacpower TM customized service (SC1318)			
	offers comprehensive options for target			
	protein production in E. coli expression			
Bacterial Expression	system at desired yield, purity, endotoxin level	Quote for different packages,	10% off	
Bacterial Expression	and tagging/tag-free stragy. Our protein	starts from 4 weeks	10 % 011	
	refolding technology is developed for			
	recovering biologically functional proteins from			
	inclusion bodies.			
	BacuVance TM baculovirus service (SC1810)			
	enables virus production and expression of			
	recombinant proteins from baculovirus-			
	infected insect cells. This eukaryotic	Quote for different packages, 7-8		
Insect Expression	expression system is able to express protein	weeks	10% off	
	with proper post-translational modifications	weeks		
	and support the production of difficult-to-			
	express proteins, such as kinases, viral			
	targets, cell surface receptors, and so on.			
	Proprietary transient mammalian expression			
	technology empowers TurboCHO TM Platform			
Mammalian Transient	to support small-scale HT (High-throughput	Quote for different packages,		
Expression	gene-to-antibody) production, Guaranteed	from 5 business days to 12	10% off	
	Recombinant Ab production, and large-scale	weeks		
	Express/HP/Stable packages for both			
	recombinant Ab and other proteins.			

Notes and Specifications:

- 1) Protein sequences are subject to evaluation for quote.
- 2) Guaranteed packages are not applicable to membrane proteins, toxic proteins and target proteins greater than 100kDa or

requested protein amount greater than package offering.

- 3) Codon optimization using GenScript proprietary GenSmart[™] tool will be performed for gene synthesis in protein expression packages.
- 4) Insoluble proteins may be subject to FoldArt[™] technology, GenScript's proprietary protein refolding platform.
- 5) All timelines are estimates and will depend on the complexity of the project. Optional steps may extend the overall timeline.
- 6) The table below illustrates our common service offerings in custom packages.

GenScript USA, Inc.

860 Centennial Ave. Piscataway, NJ 08854



Gene Synthesis	Subcloning	Expression Optimization	Pilot scale protein & expression and purification	Protein Refolding	Tag Removal
SDS-PAGE	HPLC	MALDI-TOF	Affinity Chromotography	Size-Exclusion	Ion Exchange
&Western Blot	HFLO	MALDI-TOF	Affinity Chromatography	Chromatography	Chromatography
N-terminal	Endotoxin Removal	leatono Labolina	Large-Scale Protein	Protocol	Protein Activity
sequencing	Endoloxin Hemoval	Isotope-Labeling	Production	Transfer	Assay

TurboCHO HT[™] (High Throughput) volume based Service (Gene to Antibody Service) - Made in China

Volume	Sample Size	Price (USD)	Production Time
1ml - Plate	≥ 96	\$200	1-2 weeks
10ml	N/A	\$399	Starting from 5 Business Days
30ml	N/A	\$599	Starting from 5 Business Days

TurboCHO[™] guaranteed yield-based Service (Gene to Antibody Service) - Made in Singapore

Service Platform	Scale (mg)	Sample Size	Price (USD)	Production Time	Terms
	0.1	N/A	\$499		1. If ≥85% (antibody #) are
	1	N/A	\$699		expressed and delivered, the
					whole project will be charged in
					full;
HT (High Throughput)				2 weeks	2. If <85% (antibody #) are
	5	N/A	\$1,299		expressed and delivered, we will
					charge full price for the qualified
					antibodies, and charge 40% on
					the unqualified antibodies.
	10	N/A	\$1,400		1. If the requested amount is
	20	N/A	\$1,800		delivered, the full price will be
	50	N/A	\$3,600	2-3 weeks	charged.
	100	N/A	\$5,400		2. If the requested amount is not
Express	200	N/A	\$7,200		reached, we only charge the
	500	N/A	\$12,000		price for the qualified amount of
					antibodies. E.g. The final



	1000	N/A	\$15,000	3 weeks	delivered amount is 8mg out of 10mg, we will charge \$1120.
	500	N/A	\$10,000		1. If the requested amount is
	1000	N/A	\$14,000		delivered, the full price will be
	2000	N/A	\$18,500		charged.
	3000	N/A	\$20,000	6-8 weeks	2. If the requested amount is not
HP (High Performance)	4000	N/A	\$21,500		reached, we only charge the
rin (riigiri enomiance)					price for the qualified amount of
					antibodies. E.g. The final
	5000	N/A	\$23,000		delivered amount is 400 mg out
					of 500 mg, we will charge
					\$8,000.

Notes:

1. Pricing is applicable to hlgG1, hlgG4, mouse lgG2a, rabbit lgG backbone (No chimeric) and VHH-Fc.

2. If the 1st round cannot meet the requirements, we will perform 2nd around as default free of charge. The timeline will be extended as suggested.



5. Antibody Services

Service	Description	Price and Timeline	Price
Polycional Antibody Services (Mouse, Rat, Rabbit, Goat and Guinea Pig)	PolyExpress™ packages delivers high quality pAbs in just 45 days (from order to delivery), 2 months faster than traditional immunization protocols.	Quote	10% off
	Custom polyclonal antibodies can also be generated from a variety of other host species using traditional immunization protocols (including mouse, rat, rabbit, guinea pig and goat).	Quote	10% off
	Modification-specific pAb packages available upon evaluation.	Quote	10% off
	MonoBoost [™] packages generate specific hybridoma supernatants within 45 days after antigen preparation, allowing you to evaluate the supernatant or use it right away. These packages deliver custom monoclonal antibodies quickly and with a range of costs and guarantees to meet a variety of application needs.	Quote	10% off
Monoclonal Antibody Services (Mouse & Rat)	Standard and Customized mAb packages provide compressive project design from immunization strategy, immunogen production, to fusion and screening methods, etc., while the latter offering client ultimate control at every phase of the project. Proven success in consistent Anti-idiotype (Anti-ID) mAb generation for anti-drug antibody (ADA) studies.	Quote	10% off
	Antibody Drug Discovery platform offer a complete suite of services supporting therapeutic antibody drug development from lead generation through lead optimization, characterization and antibody production. Also see Biologics Services below.	Quote	10% off
Monoclonal Antibody Services (Rabbit)	MonoRab TM Rabbit mAb Generation Service is a full scale service including antigen preparation, rabbit immunization, recombinant antibody production, and antibody sequencing; ensuring ultimate levels of reproducibility and mAb purification. Specifically tailored for IVD, IHC and Anti-ID mAb purpose.	Quote	10% off



	Antibody Modification and other Specialized		
Antibody Modification &	Services including HRP-conjugation, Fluor-labeling,	Quete	100/ -#
Paring Services	customizable purification and modification, ELISA Ab	Quote	10% off
	pairing, immunoassay development, etc.		
Antibody Coolo Un	In vivo (ascites) and in vitro (hybridoma culture)		
Antibody Scale-Up	manufacturing of antibodies at large quantities.	Quote	10% off
Production	Guaranteed yield if hybridoma generated by GenScript.		

Notes and Specifications:

1) GenScript proprietary OptimumAntigen[™] design tool and ImmunoPlus[™] antigen strategy help design the best immunogens and increase the specificity and affinity of antibodies.

2) GenScript antibody facility is AAALAC International accredited and OLAW certified.

3) GenScript offers ELISA titer guarantees and conditional application guarantees. Guarantee varies in packages and restrictions may apply.

·<u>PolyExpress™ packages</u>

deliver high-quality pAbs in just 45 days (from order to delivery), 2 months faster than traditional immunization protocols.

Service Type	Cat No.	Description	Unit Price (OLAW/AAALAC certification)	Turnaround Time	Deliverables
Rabbit pAb- Polyexpress- peptide antigen	SC1180	Express Affinity-Purified Peptide Supplied Polyclonal Antibody (Rabbit)	\$1,349.00 (OLAW/AAALAC certification)	45 days	a. 0.1mg total rabbit IgG b. 2-6mg antigen affinity purified antibody c. 2mg unconjugated peptide
Rabbit Pab- Polyexpress protein antigen	SC1676	PolyExpressTM Premium antigen-specific affinity purified pAb	\$3,099.00 (OLAW/AAALAC certification)	10-11 weeks	a.2 pAbs.1.5-6mg antigen affinity purified Ab/rabbit.Total 3 mg antibody b. 200µg protein (His tag) (85% purity) c. 0.1mg total rabbit IgG d. Quality Control Report

·<u>MonoBoost™ packages</u>

Generate specific hybridoma supernatants within 45 days after antigen preparation, allowing you to evaluate the supernatant or use it right away.

These packages deliver custom monoclonal antibodies quickly and with a range of costs and guarantees to meet a variety of application needs.



				Turnaround	
Service Type	Cat No.	Description	Unit Price	Time	Deliverables
				Time	
	SC2129	Accelerated By MonoBoost™ (3 mice)	\$9,898 (Protein antigen expressed by GenScript) \$7,499 (Protein antigen provided by customer)	13 weeks	First Delivery: -Supernatants from up to 30 parental clones (2 ml/clone) and negative control supernatants -If the sups in the first delivery don't fit the needs on customer's end and customer asks for a 2nd round of cell fusion, we perform a 2nd fusion and deliver 10 ELISA positive supernatants with additional charge of price \$999. Final Delivery: a. 1 WB positive clone for immunogen b. Up to 5 hybridoma cell lines (2 vials/clone) c. 5 ml supernatant of each hybridoma cell line d. 2 mg purified mAb from 1 clone e. 0.2 mg purified antigen (if GenScript provides)
MonoBoost™ Custom Monoclonal Antibody Service Packages					



SC2128	Classic By MonoTraditinal (5 mice)	\$7,898 (Protein antigen expressed by GenScript) \$5,499 (Protein antigen provided by customer)	23-30 weeks	First Delivery: -Supernatants from up to 20 parental clones (2 ml/clone) and negative control supernatants -If the sups in the first delivery don't fit the needs on customer's end and customer asks for a 2nd round of cell fusion, we perform a 2nd fusion and deliver 10 ELISA positive supernatants with additional charge of price \$999. Final Delivery: a. 1 WB positive clone for immunogen b. Up to 5 hybridoma cell lines (2 vials/clone) c. 5 ml supernatant of each hybridoma cell line d. 2 mg purified mAb from 1 clone e. 0.2 mg purified antigen (if GenScript provides)
--------	--	--	-------------	--

Service Type	Cat No.	Description	Unit Price	Turnaround Time	Deliverables
	SC2129	Accelerated By MonoBoost™ (3 mice)	\$9,898 (Protein antigen expressed by GenScript) \$7,499 (Protein antigen provided by	13 weeks	First Delivery: -Supernatants from up to 30 parental clones (2 ml/clone) and negative control supernatants -If the sups in the first delivery don't fit the needs on customer's end and customer asks for a 2nd round of cell fusion, we perform a 2nd fusion and deliver 10 ELISA positive supernatants with additional charge of price \$999. Final Delivery: a. 1 WB positive clone for immunogen b. Up to 5 hybridoma cell lines (2 vials/clone) c. 5 ml supernatant of each hybridoma cell line

Confidential and Privileged



			customer)		d. 2 mg purified mAb from 1 clone
MonoBoost™ Custom Monoclonal Antibody Service Packages					e. 0.2 mg purified antigen (if GenScript provides)
					First Delivery:
					-Supernatants from up to 20 parental clones (2
			\$7,898		ml/clone) and negative control supernatants
			(Protein antigen		-If the sups in the first delivery don't fit the needs
			expressed by		on customer's end and customer asks for a 2nd
			GenScript)		round of cell fusion, we perform a 2nd fusion and
		Classic By			deliver 10 ELISA positive supernatants with
	SC2128	MonoTraditinal (5		23-30 weeks	additional charge of price \$999.
		mice)			
			\$5,499		Final Delivery:
			(Protein antigen		a. 1 WB positive clone for immunogen
			provided by		b. Up to 5 hybridoma cell lines (2 vials/clone)
			customer)		c. 5 ml supernatant of each hybridoma cell line
					d. 2 mg purified mAb from 1 clone
					e. 0.2 mg purified antigen (if GenScript provides)

Service	Description	List Price
		1-20 clones: \$620/clone
		21-50 clones: \$13,000
		51-100: \$15,500
		101-200: \$19,600
	SC2190: High throughput Antibody Sequencing	201-300: \$22,500
Antibody		21-50 clones: \$11,200*
Sequencing		51-100: \$12,800*
(Hybridoma to		101-200: \$14,400*
sequence)		201-300: \$16,000*
	SC2188-US: Standard variable domain and leader sequence	\$840/clone (≥5 clones)
	sequencing	·····
	SC2188: Standard variable domain and leader sequence sequencing	\$960/clone(<5clones)
	SC2189-US: Standard full length antibody sequencing	\$1,400/clone (≥5 clones)
	SC2189: Standard full length antibody sequencing	\$1,600/clone (<5clones)

Notes and Specifications:



1) Sequencing plasmid containing antibody coding sequence and/or expression construct containing antibody coding sequence of light/heavy chain

available upon request with additional fees. Expression constructs can be bundled at the price of \$350 (both HC and LC)

2) Guarantee 100% accuracy of VH/VL sequences. No sequences no fees (only applicable for hybridoma cells).

3)*This price is for sequencing service packaged with our Mouse/Rabbit mAb and single B cell antibody discovery projects only.



6. CRISPR Services

GenScript offers a range of customized CRISPR nucleic acid reagents, viral-based screening libraries, and off-the-shelf nucleases. These customized reagents include guides, guide-expressing plasmids, HDR templates (aka "payloads"), etc.

The services will support applications including GOI screening, *in vitro* functional assays, *in vivo* validation, and cGMP grades services needs in clinical research and commercialization

Service	List Pric	List Price and TAT						PSU price
	L		EasyEdit (RUO)	SafeEdit (RUO)	cGMP	
	Length (nt)	Quantity	Price	Production Time	Price	Production Time		
		2 nmol	US\$79		US\$199			5% off
GenCRISPR		4 nmol	US\$149	4-5 CD/ 3-4	US\$319	7 CD/ 5 BD	Quote	5% off
sgRNA	97-103	10 nmol	US\$329	BD	US\$579		Required	5% off
		50 nmol	US\$999	5-7 CD/ 4-5	US\$1,699	9 CD/ 7 BD		5% off
		100 nmol	US\$1,299	BD	US\$2,499	14 CD/ 10 BD		5% off
	Length (nt)	Quantity	RUO Price		RUO TAT	I	cGMP	
		3 µg	\$400					10% off
		5 µg	\$550					10% off
	151- 500	10 µg	\$800		15-18 BD			10% off
		20 µg	\$1,300					10% off
		>20 µg	Quote Required					10% off
GenExact ssDNA		3 µg	\$0.8/nt				Quote	10% off
		5 µg	\$1/nt				Required	10% off



	501-	[]	I	10%
	2999	10 µg	\$1.3/nt		18-23 BD		off
							10%
		20 µg	\$1.9/nt				off
		>20 µg	Quote Req	luired			10%
		0					off
	3000- 5000	Quote Required	Quote Req	luired	Quote Required		10% off
	Length (bp)	Quantity	RUO Price	9	RUO TAT	cGMP	
		100 µg	\$1,800				10% off
		500 μg	\$5,000				10%
	0000						off
	2000- 5000	1mg	\$8,000				10% off
							10%
		10mg					off
		>10 mg					10%
GenWand		- 3			20-55* BD	Quote	off
dsDNA		100 µg	\$2,000			Required	10% off
							10%
		500 μg	\$6,000				off
	5001-	1mg	\$10,000				10%
	10000	ing	φ10,000				off
		10mg	\$55,000				10%
							off 10%
		>10 mg	Quote Req	luired			off
	*Please	note that a	dditional tim	ne and cost is	required to synthesize the	e starting	
	gene sy	nthesis terr	plate for Ge	enWand dsDN	IA		
	Length		Industrial	Grade	Preclinical Grade (RUC))	
	(bp)	Quantity				1	
			Price	TAT	Price	TAT	1001
		100 µg	\$500		/		10% off
			<u> </u>				



				_		_	
		200 µg	\$600		/		10% off
		E00	¢700				10%
		500 µg	\$700		1		off
GenCircle Plasmid	1000-	1mg	\$880	11-33* BD	\$1,056	19-35 *	10%
Plasmid	8000		+	11-33" BD		BD	off
		10 mg	\$1,620		\$1,944		10%
							off
		100 mg	\$7,200		\$8,640		10% off
							10%
		500 mg	\$31,320		\$37,584		off
			Quote				10%
		>500 mg	Required		Quote Required		off
	*Please	note that a	dditional tim	e and cost is	required to synthesize the	e starting	
	gene sy	nthesis terr	plate for Ge	enCircle.			
CRISPR	\$99 or \$	199.				TAT	
Plasmids			g for in-stock	plasmids		Quote	5%
			,			Required	off
CRISPR	Pricina i	s depender	nt on library	size		Quote	10%
Libraries						Required	off
Microbial		Quote 1					
Genome	Starts fro	Starts from \$4,000, Starts from 4 weeks Required o					
Editing							



7. Biologics Discovery and Development

GenScript offers a comprehensive portfolio of Biologics Services covering custom antibody drug discovery and development services with stringent IP protection.

The services include Target Discovery, Ab Lead Generation and Optimization, Ab Production and Ab Testing. With a proven record of success,

we provide high quality services along with the convenience of one-stop solution.

Service	Description	Price and Time line		
CellPower™	Recombinant stable pool or single cell-derived clones generated from lentiviral transduction. Suitable for assay studies and antigen usage. Viral (lentivirus	Quote for price, starts from		
For Assay Cell Line	or retrovirus) or non-viral (plasmid, chemical or physical) based transduction	7 weeks for stable pool,		
Development	options available. Experienced in stable expression of membrane proteins.	starts from 12-16 weeks for		
	Guaranteed mRNA expression and mycoplasma-free control.	single clone		
	Hybridoma generation by selecting from a full specturm of immunization			
Hybridoma Generation	approaches to insure robust and appropriate immune responses. HTP			
for Therapeutic	screening and comprehensive functional assay. Yields up to 100 high quality	Quote		
Antibody Discovery	clonal hybridomas, with readily integrated downstream services (sequencing,			
	humanization, rAb production, anti-ID for PK/PD studies)			
	GenScript's SMAB (Single-domain antibody fused to monoclonal Ab) platform			
SMAB Bispecific	naturally combine the single domain Ab and the monoclonal Ab to make a	Qualta		
Antibody	bispecific antibody in symmetric format with good biological efficacy and good	Quote		
	developability. Available for R&D service and co-development model.			
	Combining in silico CDR-grafting, structure-based back mutation, and			
	supported by our patented FASEBA (Fast Screening for Expression,	Quote for price, 12-13		
Antikadu Ikunaninatian	Biophysical-properties and Affinity) screening, Biacore SPR platform and	weeks for Express package		
Antibody Humanization	functional assay platform, we guarantee the humanized Abs have comparable	14-15 weeks for Deluxe		
	affinity with parental antibody. Express package and Deluxe package	package		
	available to suit different needs.			
Antibody Affinity	Supported by phage display and FASEBA screening, antibody affinity	Ouete fer price 1 5 month		
Maturation	increases for at least 5 fold and up to 100 fold.	Quote for price, 4-5 month		
Production Stable Cell	Please see "mammalian stable expression" in protein services for stable cell			
	line development. Process development includes Upstream (culture condition,	Quete		
Line & Process	feeding strategy, scale-up to bioreactor, QC and optimization) and	Quote		
Development	Downstream (purification, modification, and analytical assay) development.			
Affinity Ranking &	Biacore SPR supported affinity ranking, affinity measurement and kinetics			
	measurement, delivers analytical data with high accuracy, reasonable price	Quote for price, 1-2 weeks		
Measurement	and fast speed.			



Immune-Checkpoint AssaysAssay targets include: PD-1, PD-L1, CTLA-4, OX40, CD40, GITR, 4-1BB, TIGIT, and LAG-3. Final reports include: raw data (7 concentrations) and analyzed data (EC50, dose-response curves of samples and controls)Quote for price, 1 weekAssays-Ready-to-go ADCCassay format for at least 4 targets: HER2/ErbB2, CD20, EGFR, and TNFα: Ready-to-go CDC assay format for at least 2 targets: CD20 and TNFα. Large panel of target tumor cell lines free of charge to be used in ADCC assays. PBMC-based or NK cell-based ADCC assay format. CDC assay uses normal human serum as the source of complement. Inquire for ADCP assay.OuteOther <i>in vitro</i> Pharmacology ServicesFull panel of assays for Protease profiling, GPCR profiling, Kinase profiling, etc. available.QuoteBiochemical Assays: Affinity ranking/measurement, Epitope mapping, Antibody sequencing; Cell-based Assays: Immune-checkpoint assay, ADCC/CDC/ADCP, Apoptosis/Proliferation/ Phagocytosis assay, Neutralization assay, Assay cell line development; Purity test, PI test, Impurity analysis (HCP, HCD, etc.), Charge variant analyzis (HCP, HCD, etc.), Charge variantOute				
AssaysTIGIT, and LAG-3. Final reports include: raw data (7 concentrations) and analyzed data (EC50, dose-response curves of samples and controls)Quote for price, 1 weekAssays-Ready-to-go ADCCassay format for at least 4 targets: HER2/ErbB2, CD20, EGFR, and TNFα; Ready-to-go CDC assay format for at least 2 targets: CD20 and TNFα. Large panel of target tumor cell lines free of charge to be used in ADCC assays. PBMC-based or NK cell-based ADCC assay format. CDC assay uses normal human serum as the source of complement. Inquire for ADCP assay.OuteOther <i>in vitro</i> Pharmacology ServicesFull panel of assays for Protease profiling, GPCR profiling, Kinase profiling, etc. available.QuoteBioanalytical ServicesBiochemical Assays: Affinity ranking/measurement, Epitope mapping, Antibody sequencing; Cell-based Assays: Immune-checkpoint assay, Assay cell line development;QuoteProtein Analytics: MW analysis, sequence coverage analysis, PTM analysis, Purity test, PI test, Impurity analysis (HCP, HCD, etc.), Charge variantQuote	Immune-Checknoint	Assay targets include: PD-1, PD-L1, CTLA-4, OX40, CD40, GITR, 4-1BB,		
ADCC & CDC Assays:Ready-to-go ADCCassay format for at least 4 targets: HER2/ErbB2, CD20, EGFR, and TNFα; Ready-to-go CDC assay format for at least 2 targets: CD20 and TNFα. Large panel of target tumor cell lines free of charge to be used in ADCC assays. PBMC-based or NK cell-based ADCC assay format. CDC assay uses normal human serum as the source of complement. Inquire for ADCP assay.QuoteOther <i>in vitro</i> Pharmacology ServicesFull panel of assays for Protease profiling, GPCR profiling, Kinase profiling, etc. available.QuoteBiochemical Assays: Affinity ranking/measurement, Epitope mapping, Antibody sequencing; Cell-based Assays: Immune-checkpoint assays, ADCC/CDC/ADCP, Apoptosis/Proliferation/ Phagocytosis assay, Neutralization assay, Assay cell line development; Protein Analytics: MW analysis, sequence coverage analysis, PTM analysis, Purity test, PI test, Impurity analysis (HCP, HCD, etc.), Charge variantQuote	•	TIGIT, and LAG-3. Final reports include: raw data (7 concentrations) and	Quote for price, 1 week	
ADCC & CDC AssaysEGFR, and TNFα; Ready-to-go CDC assay format for at least 2 targets: CD20 and TNFα. Large panel of target tumor cell lines free of charge to be used in ADCC assays. PBMC-based or NK cell-based ADCC assay format. CDC assay uses normal human serum as the source of complement. Inquire for ADCP assay.QuoteOther in vitroFull panel of assays for Protease profiling, GPCR profiling, Kinase profiling, etc. available.QuotePharmacology ServicesBiochemical Assays: Affinity ranking/measurement, Epitope mapping, Antibody sequencing;QuoteCell-based Assays: Immune-checkpoint assays, ADCC/CDC/ADCP, Apoptosis/Proliferation/ Phagocytosis assay, Neutralization assay, Assay cell line development;QuoteProtein Analytics: MW analysis, sequence coverage analysis, PTM analysis, Purity test, PI test, Impurity analysis (HCP, HCD, etc.), Charge variantQuote	Assays	analyzed data (EC50, dose-response curves of samples and controls)		
ADCC & CDC Assaysand TNFα. Large panel of target tumor cell lines free of charge to be used in ADCC assays. PBMC-based or NK cell-based ADCC assay format. CDC assay uses normal human serum as the source of complement. Inquire for ADCP assay.QuoteOther in vitroFull panel of assays for Protease profiling, GPCR profiling, Kinase profiling, etc. available.QuoteBiochemical Assays: Affinity ranking/measurement, Epitope mapping, Antibody sequencing; Cell-based Assays: Immune-checkpoint assays, ADCC/CDC/ADCP, Apoptosis/Proliferation/ Phagocytosis assay, Neutralization assay, Assay cell line development; Protein Analytics: MW analysis, sequence coverage analysis, PTM analysis, Purity test, PI test, Impurity analysis (HCP, HCD, etc.), Charge variantQuote		·Ready-to-go ADCCassay format for at least 4 targets: HER2/ErbB2, CD20,		
ADCC & CDC Assays ADCC assays. PBMC-based or NK cell-based ADCC assay format. CDC assay uses normal human serum as the source of complement. Inquire for ADCP assay. Quote Other in vitro Full panel of assays for Protease profiling, GPCR profiling, Kinase profiling, etc. available. Quote Pharmacology Services Biochemical Assays: Affinity ranking/measurement, Epitope mapping, Antibody sequencing; Quote Bioanalytical Services Cell-based Assays: Immune-checkpoint assays, ADCC/CDC/ADCP, Apoptosis/Proliferation/ Phagocytosis assay, Neutralization assay, Assay cell line development; Quote Protein Analytics: MW analysis, sequence coverage analysis, PTM analysis, Purity test, PI test, Impurity analysis (HCP, HCD, etc.), Charge variant Quote		EGFR, and TNF α ; Ready-to-go CDC assay format for at least 2 targets: CD20		
ADCC assays. PBMC-based or NK cell-based ADCC assay format. CDC assay uses normal human serum as the source of complement. Inquire for ADCP assay. Other <i>in vitro</i> Pharmacology Services Full panel of assays for Protease profiling, GPCR profiling, Kinase Quote Biochemical Assays: Affinity ranking/measurement, Epitope mapping, Antibody sequencing; Cell-based Assays: Immune-checkpoint assays, ADCC/CDC/ADCP, Apoptosis/Proliferation/ Phagocytosis assay, Neutralization assay, Assay cell line development; Protein Analytics: MW analysis, sequence coverage analysis, PTM analysis, Purity test, PI test, Impurity analysis (HCP, HCD, etc.), Charge variant		and $TNF\alpha.$ Large panel of target tumor cell lines free of charge to be used in	Quete	
ADCP assay.Cell panel of assays for Protease profiling, GPCR profiling, Kinase QuoteQuotePharmacology ServicesFull panel of assays for Protease profiling, GPCR profiling, Kinase profiling, etc. available.QuoteBiochemical Assays: Affinity ranking/measurement, Epitope mapping, Antibody sequencing;Antibody sequencing;Cell-based Assays: Immune-checkpoint assays, ADCC/CDC/ADCP, Apoptosis/Proliferation/Phagocytosis assay, Neutralization assay, Assay cell line development;QuoteProtein Analytics: MW analysis, sequence coverage analysis, PTM analysis, Purity test, PI test, Impurity analysis (HCP, HCD, etc.), Charge variantAntibody sequencing	ADCC & CDC Assays	ADCC assays. PBMC-based or NK cell-based ADCC assay format. CDC	Quote	
Other in vitro Full panel of assays for Protease profiling, GPCR profiling, Kinase Quote Pharmacology Services Biochemical Assays: Affinity ranking/measurement, Epitope mapping, Antibody sequencing; Quote Bioanalytical Services Cell-based Assays: Immune-checkpoint assays, ADCC/CDC/ADCP, Apoptosis/Proliferation/ Phagocytosis assay, Neutralization assay, Assay cell line development; Quote Protein Analytics: MW analysis, sequence coverage analysis, PTM analysis, Purity test, PI test, Impurity analysis (HCP, HCD, etc.), Charge variant Purity test, PI test, Impurity analysis (HCP, HCD, etc.), Charge variant		assay uses normal human serum as the source of complement. Inquire for		
Pharmacology ServicesQuotePharmacology ServicesBiochemical Assays: Affinity ranking/measurement, Epitope mapping, Antibody sequencing;Bioanalytical ServicesCell-based Assays: Immune-checkpoint assays, ADCC/CDC/ADCP, Apoptosis/Proliferation/ Phagocytosis assay, Neutralization assay, Assay cell line development;QuoteProtein Analytics: MW analysis, sequence coverage analysis, PTM analysis, Purity test, PI test, Impurity analysis (HCP, HCD, etc.), Charge variantQuote		ADCP assay.		
Pharmacology Services profiling, etc. available. Biochemical Assays: Affinity ranking/measurement, Epitope mapping, Antibody sequencing; Antibody sequencing; Cell-based Assays: Immune-checkpoint assays, ADCC/CDC/ADCP, Apoptosis/Proliferation/ Phagocytosis assay, Neutralization assay, Assay cell line development; Quote Protein Analytics: MW analysis, sequence coverage analysis, PTM analysis, Purity test, PI test, Impurity analysis (HCP, HCD, etc.), Charge variant Amage analysis	Other in vitro	Full panel of assays for Protease profiling, GPCR profiling, Kinase	Quete	
Bioanalytical Services Antibody sequencing; Cell-based Assays: Immune-checkpoint assays, ADCC/CDC/ADCP, Apoptosis/Proliferation/ Phagocytosis assay, Neutralization assay, Assay cell line development; Protein Analytics: MW analysis, sequence coverage analysis, PTM analysis, Purity test, PI test, Impurity analysis (HCP, HCD, etc.), Charge variant	Pharmacology Services	profiling, etc. available.	Quote	
Bioanalytical Services Cell-based Assays: Immune-checkpoint assays, ADCC/CDC/ADCP, Apoptosis/Proliferation/ Phagocytosis assay, Neutralization assay, Assay cell Quote line development; Protein Analytics: MW analysis, sequence coverage analysis, PTM analysis, Purity test, PI test, Impurity analysis (HCP, HCD, etc.), Charge variant		Biochemical Assays: Affinity ranking/measurement, Epitope mapping,		
Bioanalytical Services Apoptosis/Proliferation/ Phagocytosis assay, Neutralization assay, Assay cell Quote line development; Protein Analytics: MW analysis, sequence coverage analysis, PTM analysis, Purity test, PI test, Impurity analysis (HCP, HCD, etc.), Charge variant		Antibody sequencing;		
Bioanalytical Services Quote line development; Quote Protein Analytics: MW analysis, sequence coverage analysis, PTM analysis, Purity test, PI test, Impurity analysis (HCP, HCD, etc.), Charge variant Quote		Cell-based Assays: Immune-checkpoint assays, ADCC/CDC/ADCP,		
line development; Protein Analytics: MW analysis, sequence coverage analysis, PTM analysis, Purity test, PI test, Impurity analysis (HCP, HCD, etc.), Charge variant	Biographylical Complete	Apoptosis/Proliferation/ Phagocytosis assay, Neutralization assay, Assay cell	Quete	
Purity test, PI test, Impurity analysis (HCP, HCD, etc.), Charge variant	Bioanalytical Services	line development;	Quole	
		Protein Analytics: MW analysis, sequence coverage analysis, PTM analysis,		
analysis N/C terminal sequence verification N alyses analysis		Purity test, PI test, Impurity analysis (HCP, HCD, etc.), Charge variant		
analysis, iv/o terminal sequence vernication, iv-grycan analysis.		analysis, N/C terminal sequence verification, N-glycan analysis.		



8. Assay Cell Line Development

Service	Description	Listing Price	Timeline	Deliverables	
Octvice	Description	Listing Thee	(Business Days)	Deliverables	
Lentivirus Packaging	High quality Lentiviral packaging	Customized pricing		Purified lentiviral	
	service	based on volume and	5 weeks		
Service	(SC1394-VP-1)	Titer		particles	
	Stable assay cell line generation:				
	constitutive and inducible		8-25 weeks production		
	overexpressing and silencing cell	Quote based on	time based on complexity	Madified call line	
Assay Cell Lines	lines		of the project; shipping	Modified cell line	
	(Use SC6666PF in SC1394, and	project	can vary 3-12 weeks	cloned or pooled	
	note in SC6666PF with the cell line		based on cell type		
	name)				

Notes and Specifications:

1)Default QC for Lentiviral preps: p24 ELISA, Mycoplasma (Lonza kit), Additional fees for FACS, qPCR, Antibiotic Selection; Bacterial

2)Assay Cell line QC western Blot and qPCR. Optional QC/downstream assays are available for an additional cost.



9. mRNA Services

IVT mRNA Production

GenScript's solution to mRNA production streamlines your workflow starting from gene synthesis to IVT mRNA production.

mRNAs produced at GenScript are optimized with our proprietary production platform, ensuring the quality and expression efficiency of your mRNA.

The capacity of the synthesis platform ranges from ug to g to meet the needs of mRNA development at different stages, in addition, capping,

polyA tail and chemical modification are all included in the mRNA synthesis service at no additional cost.

Service	Purification	Amount	List Price (\$*)	TAT (Calendar days)*	PSU Price
RUO-Grade mRNA synthesis	<10 mg use LiCl precipitation; >10 mg use Tangential Flow Filtration (TFF)	0.1 mg 0.5 mg 1 mg 2 mg 5 mg 10 mg 20 mg >20 mg	\$500 \$1,750 \$3,000 \$4,000 \$5,000 \$7,500 \$9,100 Quote F	14 14 14 14 14 14 21 21 21 Required	10% off
Preclinical-Grade mRNA synthesis	Oligo dT purification	1 mg 2 mg 5 mg 10 mg 20 mg >20 mg	\$4,400 \$5,500 \$8,000 \$11,500 \$15,600 Quote F	21 21 21 21 21 21 Required	- 10% off

- 1. Additional time and cost are required to manufacture IVT synthesis DNA template (unless provided by client).
- mRNA synthesis price includes 5' cap choice (GenScript's proprietary Cap 0 and Cap 1 options), Poly(A) tail up to 120 nt, NPT modifications (5-moU, N1-me-Ψ, 5-me-C + Ψ),
- 3. delivery/suspension buffer (sodium citrate, TE, RNase-free water), aliquoted into number of vials specified by customer; QC reports, and COA documents.
- 4. Additional QC packages and options are available for an additional cost. Please see here: IVT (In vitro Transcription) mRNA Production (genscript.com)



IVT Circular RNA Production

Circular RNA is a single-stranded RNA in which the 5' and 3' ends join to form a covalently closed loop. The circular structure confers multiple functional benefits, including improved stability and longer expression duration. GenScript proudly offers custom circular RNA (circRNA) synthesis via our proprietary circRNA IVT manufacturing service.

Service	Purification	Amount	List Price (\$*)	TAT (Calendar days)*	PSU price				
		0.1 mg	\$3,000	21	10% off				
RUO Crede	Dranzistary UDLC	0.5 mg	\$5,500	21	10% off				
RUO-Grade circRNA	Proprietary HPLC purification	1mg	\$8,000	21	10% off	Π			
synthesis	punication	2mg	\$12,500	21	10% off				
Synthesis		5mg	\$25,000	21	10% off				
		10mg	\$42,500	21	10% off				

- 1. Additional time and cost are required to manufacture IVT synthesis DNA template (unless provided by client).
- 2. delivery/suspension buffer (sodium citrate, TE, RNase-free water), aliquoted into number of vials specified by customer; QC reports, and COA documents.
- 3. Additional QC packages and options are available for an additional cost. Please see here: Custom Circular RNA Synthesis | GenScript

Lipid Nanoparticles Service

To streamline the production workflow for mRNA from gene synthesis to delivery, GenScript developed its Lipid Nanoparticles (LNP) service with multiple formulation options, providing delivery solutions for mRNA screening projects with high efficiency and safety. GenScript's mRNA solution will not only facilitate the mRNA research field by saving time and cost but it can also reduce the potential logistical risks involved in each production step.

Service Options Amount	List Price(\$*)	TAT (Calendar days)*	PSU price
------------------------	-----------------	----------------------------	-----------



		0.2 mg	\$2,000	7	10% off	
		0.5 mg	\$3,500	7	10% off	
	MC3/ SM102/	1mg	\$5,500	7	10% off	
LNP Encapsulation	ALC0315/ LP01	2mg	\$9,500	7	10% off	
		3mg	\$11,500	7	10% off	
		5mg	\$15,000	7	10% off	
		10mg	\$23,000	7	10% off	
		20mg	\$40,000	7	10% off	

- 1. Additional time and cost are required to manufacture IVT synthesis DNA template and RNA payloads (unless provided by client).
- 2. delivery/suspension buffer (PBS/Sucrose, PBS, Tris-HCL/Surcose, Tris-HCL, Mannitol), aliquoted into number of vials specified by customer; QC reports, and COA documents.
- 3. Additional QC packages and options are available for an additional cost. Please see here: Lipid Nanoparticle Packaging for Advanced RNA Delivery | GenScript



10. Oligo Services

With state-of-art oligo synthesizers and experienced experts in chemical synthesis, GenScript offers custom DNA oligo, RNA oligo and comprehensive modifications

to meet research needs in biology, diagnostics and drug discovery.

Service	Purification Method	Length	Quantity (nmol)	List Price (\$/nt)	TAT (BD)	PSU Price	
			1-5 nmol	\$0.30			
	Desalt	15-59 nt	6-15 nmol	\$0.30		10% off 10% off 10% off 10% off	
	Desail	15-59 11	16-20 nmol	\$0.40	2-3		
			21-25 nmol	\$0.40			
			1-5 nmol	\$1.20		10% off 10% off 10% off	
			6-10 nmol	\$1.20			
DNA oligo synthesis	PAGE	15-59 nt	11-15 nmol	\$1.20	3		
Synthesis			16-20 nmol	\$1.30			
			21-25 nmol	\$1.30			
			1-5 nmol	\$1.67			
	HPLC	15-39 nt	6-15 nmol	\$1.67	5	10% off	
		10-00 11	16-20 nmol	\$2.00	5	1078 011	
			21-25 nmol	\$2.00			
RNA oligo	BNase free	15-60 nt	0-15nmol	\$3.00	8-10	10% off	
synthesis	RNase free	10-00 m	16-25nmol	\$5.00		1070 011	
Synthesis		61-100 nt	0-10nmol	\$3.00	12	10% off	



11. Molecular Biology Services on GenSmart 2.0

GenSmart[™] Codon Optimization employs a novel algorithm inspired by the "Population Immune Algorithm." This approach fuses principles from both population genetics and immunology, thoroughly analyzing over 200 elements contributing to gene expression, such as GC content, codon usage, RNase splicing sites, and cis-acting mRNA destabilizing motifs. Rather than utilizing a singular simulation model, this system incorporates a multifaceted approach, giving importance to all essential aspects of a target gene sequence. Consequently, every gene optimization is individualized, enhancing the likelihood of generating higher expression in your species of choice.

Reference:

1.WO2020024917A1_Codon_optmization_Patent.pdf

2.Dr. Liu's laboratory at Harvard University; Koblan WL et al. 2018. Improving cytidine and adenine base editors by expression optimization and ancestral reconstruction. Nature Biotechnology

Gene Synthesis (SC0001)

SC0001 Starting	Sequence Length Mini Charge	Listing Price \$89	Timeline (Business Day) 9-13	Price same	Comments
from 9-14 Business	≤1.5kb 1.5-3kb	\$0.19/bp \$0.19/bp	9-13 10-14	same same	CN site only
Days	3-5kb 5-8kb	\$0.23/bp \$0.27/bp	14-18 19-23	same same	
Starting from 5-10	Mini Charge ≤1.5kb	\$159 \$0.35/bp	6-10 6-10	same ≤1kb, \$0.21/bp 1-2kb, \$0.31/bp	CN Site and US site are
Business Days	1.5-3kb 3-5kb 5-8kb	\$0.35/bp \$0.40/bp \$0.45/bp	8-12 10-14 15-19	2-3kb, \$0.32/bp \$0.38/bp \$0.40/bp	available
Starting from 3-8 Business Days	Mini Charge ≤1.5kb 1.5-3kb 3-5kb 5-8kb	\$299 \$0.7/bp \$0.7/bp \$0.8/bp IQR	3-7 3-7 5-9 7-11 IQR	same 0.65/bp 0.65/bp 0.75/bp IQR	CN Site and US site are available
Starting	Mini Charge ≤1.5kb	\$299 \$0.7/bp	3-4 3-4	same 0.65/bp	US site only



from 3-4	1.5-3kb	\$0.7/bp	5-6	0.65/bp	will be
Business	3-5kb	\$0.8/bp	7-8	0.75/bp	available in
Days	5-8kb	IQR	IQR	IQR	2024.1

Standard Delivery:

- ·4 µg of lyophilized plasmid containing your gene insert (1 µg for low-copy plasmid)
- ·Sequence chromatograms or NGS read depth plot covering your gene (electronic)
- ·Construct map for the plasmid (electronic)
- ·Quality assurance certificate

Note:

- 1. Price and Turnaround time for simple genes only
- 2.Shipping is not included in the estimated turnaround time
- 3.GenScript guarantees 100% sequencing accuracy for all gene synthesis products.

4. The complexity of gene synthesis will be assessed individually for each gene using GenScript's specialized algorithms. Sequences contain extremely high or low GC content, repetitive areas, inverted repeats, and other factors necessitate more customized adjustments in the manufacturing process. More detail guidelines can be found here.

5.GenScript uses pUC57 as the standard cloning vector at no extra cost.

6.Example NGS QC report for your gene order

Cloning (SC0002) Bundle with Gene Synthesis

Vector Type	Insert Sequence	Listing Price	Timeline (Business Day)	PSU price			
GenScript Clone Vector		\$0	0	same			
GenScript Expression vector	<=8kb	\$49	2	same			
My Archived Vector		\$49	3~5	same			
Customer Provide; Not	<=3kb	\$149	5	same			
Archive	(3kb~6kb]	\$199	5	same			
	(6kb~8kb]	\$249	5	same			
All vectors	>8kb	IQR	>10	same			



Subcloning (SC0005)

	(Template from previous orders)		(Template from Customer)		PSU price	
Insert Sequence	Listing Price	Timeline (BD)	Listing Price	Timeline (BD)	same	
<=3kb	\$149	from 1-2 week	\$295+(n-	from 1-2 week	same	
(3kb~6kb]	\$199	from 2-3 weeks	1)*\$100	from 2-3 weeks	same	
(6kb~8kb]	\$249	from 3 weeks	1) Ψ100	from 3 weeks	same	
>8kb	IQR	IQR	IQR	IQR	same	

Note:

1.A list of expression cloning vector list is available at:http://www.genscript.com/express-cloning-vector-list.html

2. Must be bundled with Gene synthesis (SC0001). Non-standard non-restriction cloning results in CloneEZ variable Pricing.

Plasmid Prep (SC0003) Price for Bundle with SC0002

Tier Level	Tier1		Tier2		Tie	er3	
Application	For clonal Use	Fc	or transfection L	lse	For Animal Study		
Grade	Research Grade	Industrial Grade			Preclinical Grade		
Quantity	10 µg-1 mg		10 µg-2g		10 m	ng-2g	
Timeline		Start From 2-7	Business Day		Start from	n 2 Weeks	
Supercoil	Predominantly		>80%		>9	0%	
Endotoxin	No Guarantee	≤0.1EU/µg	≤0.01EU/µg	≤0.005EU/µg	≤0.01EU/µg	≤0.005EU/µg	
10 µg	\$19	\$29	\$39	\$89	-	-	
30 µg	\$29	\$49	\$69	\$119	-	-	
100 µg	\$39	\$89	\$99	\$149	-	-	
200 µg	\$69	\$129	\$139	\$189	-	-	
500 µg	\$99	\$179	\$199	\$249	-	-	
1 mg	\$119	\$219	\$239	\$289	-	-	
2 mg	-	\$259	\$279	\$329	-	-	
5 mg	-	\$379	\$419	\$469	-	-	
10 mg	-	\$619	\$679	\$729	\$1,199	\$1,249	
20 mg	-	\$989	\$1,099	\$1,149	\$1,799	\$1,849	
50 mg	-	\$1,979	\$2,199	\$2,289	\$3,499	\$3,589	



100 mg	-	\$3,329	\$3,699	\$3,879	\$5,499	\$5,679
200 mg	-	\$4,229	\$4,699	\$5,049	\$6,999	\$7,349
500 mg	-	\$6,929	\$7,699	\$8,569	\$11,599	\$12,469
1 g	-	\$11,699	\$12,999	\$14,729	\$17,599	\$19,329
1.5 g	-	\$16,199	\$17,999	\$20,589	\$24,299	\$26,889
2 g	-	\$20,699	\$22,999	\$26,449	\$31,099	\$34,549
Discounts	10% off	10% off	10% off	10% off	10% off	10% off

Plasmid Prep (SC0003) Price for template from Ark or from customers

Tier Level	Tier1		Tier2		Ti	er3
Application	For clonal Use	Fo	or transfection L	Jse	For Anir	nal Study
Grade	Research		Industrial Grade		Preclinic	al Grade
Grade	Grade					
Quantity	30 µg-1 mg		30 µg-2g		10 n	ng-2g
Timeline		Start From 7 I	Business Day		Start fron	n 2 Weeks
Supercoil	Predominantly		>80%		>9	0%
Endotoxin	No Guarantee	≤0.1EU/µg	≤0.01EU/µg	≤0.005EU/µg	≤0.01EU/µg	≤0.005EU/µg
30 µg	\$29	\$49	\$69	\$119	-	-
100 µg	\$39	\$89	\$99	\$149	-	-
200 µg	\$69	\$129	\$139	\$189	-	-
500 µg	\$99	\$179	\$199	\$249	-	-
1 mg	\$119	\$219	\$239	\$289	-	-
2 mg	-	\$259	\$279	\$329	-	-
5 mg	-	\$379	\$419	\$469	-	-
10 mg	-	\$769	\$849	\$899	\$1,199	\$1,249
20 mg	-	\$1,169	\$1,299	\$1,349	\$1,799	\$1,849
50 mg	-	\$2,429	\$2,699	\$2,749	\$3,499	\$3,589
100 mg	-	\$4,139	\$4,599	\$4,649	\$5,499	\$5,679
200 mg	-	\$5,219	\$5,799	\$5,849	\$6,999	\$7,349
500 mg	-	\$8,639	\$9,599	\$9,649	\$11,599	\$12,469
1 g	-	\$14,399	\$15,999	\$16,049	\$17,599	\$19,329
1.5 g	-	\$20,699	\$22,999	\$23,049	\$24,299	\$26,889
2 g	-	\$26,099	\$28,999	\$29,049	\$31,099	\$34,549
Discounts	10% off	10% off	10% off	10% off	10% off	10% off

Note:

1. Animal-free production with TSE/BSE certification is available as an optional add-on.

2. Must be bundled with Cloning (SC0002). The price and timeline is for high copy plasmid, quote for low copy plasmid.



3. Larger quantities to gram scale available, quote for price and turnaround time

4.GenScript's plasmid preparation service ensures delivery of plasmids in equal or greater quantities than those specified

5.10µg is only applied for bundled plasmid

Plasmid Linearization (SC0003-L) Need to bundle with SC0003

Enzyme	['EacD!' !! lind!!!' !!				
Site		Samni , Anoi , Ecorv , Abai , Aphi	[[Scar, Bsa	['Scal','Bsal','Pvul','Notl','BspQl']	
SC0003	Tior 190		Tior 190	Tion 190	
Tier	Tier 1&2		Tier 1&2		
Quantity	LSP \$	TAT (CD)	LSP \$	TAT (CD)	
30µg	\$89	3	\$89	3	
100µg	\$89	3	\$89	3	
200µg	\$89	3	\$89	3	
500µg	\$199	3	\$199	3	
1mg	\$209	4	\$209	4	
2mg	\$291	4	\$352	4	

Note:

Linearized quantity >5mg, need IQR

The price and timeline is for high copy plasmid, quote for low copy plasmid.

Concentration >2mg/ml, need IQR

Site mutagenesis (SC0004)

SC0004	Bundled with gene synthesis		Template from Ark		Template from Customer	
Insert Sequence	Listing Driss		Listing Driss		Listing Price	TAT
Length	Listing Price	TAT (BD)	Listing Price	TAT (BD)	Listing Price	(BD)
<=3kb	\$99*M	5	\$99*M	5	\$169*M+\$100(N- 1)	8
(3kb~8kb]	\$99*M+\$100	5	\$99*M+\$100	5		
(8kb~15kb]	\$99*M+\$599	10	IQR		IQR	
(15kb~20kb]	\$99*M+\$1299	10				
(20kb~30kb]	\$99*M+\$2199	15				
(30kb~50kb]	\$99*M+\$3199	15				
(50kb~100kb]	\$99*M+\$16999	20				
(100kb~200kb]	\$99*M+\$16999	>20				
>200kb	IQR	IQR				



Comments	TAT is just for mutation sites <6; IQR is required when mutation sites are≥6.	TAT is just for mutation sites=1 or 2; Need to add 7 days when mutation sites=3,4,5; IQR is required when mutation sites are \geq 6.
----------	--	--

Note:

7.5% off

M: Mutation number, Any combination of base changes within a 30-base frame

N: round# of Kb of insert length (e.g, for 0.4kb, n=1, 1.4kb, n=2)



II. Catalog Products

GenScript offer a wide variety of catalog products. Product offerings include but not limited to:

- Molecular Biology Reagents for PCR, Cloning, Plasmid Prep and Gel extraction
- CRISPR Products
- Reagents for Protein Purification and Analysis
- PAGE gel and DNA electrophoresis
- Endotoxin Detection and Removal system
- Recombinant Proteins including Cytokines, Chemokines, Growth factors, Immune Checkpoints and Tag cleavage enzymes
- · Antibodies including Primary, Secondary, Anti-idiotype and Epitope antibodies
- IVD Biological Materials
- · Off-the-shelf stable cell lines (Immune Checkpoints, GPCR

A complete list of GenScript's catalog products can be viewed via the link below: http://www.genscript.com/products.html

PSU discount

III.CONFIDENTIALITY

GenScript considers the information contained herein as confidential information. In consideration for receipt hereof, Client shall not disclose the information contained herein to third parties absent written pre-approval from GenScript.

IV.PRICING CONDITIONS

Pricing is based upon the service specifications of GenScript. GenScript reserves the right to change prices for Services and Products at any time, and does not provide price protection or refunds in the event of a price drop or promotional offering. Client will be consulted and notified in writing if pricing changes.

V.SHIPPING AND HANDLING

All packages are shipped via FedEx Express for US clients unless otherwise requested by client. Shipping and Handling charges will be added to the original invoice.



VI.MILESTONE DISCOUNT AND MILESTONE REBATE CREDITS

GenScript will provide PSU a milestone discount once the following purchase or payment milestone is reached.

- 1. When passing \$150k milestone, there will be an additional discount 2.5%
- 2. When passing \$500k milestone, there will be an additional discount of 4%
- 3. When passing \$1.0M milestone, there will be an additional discount of 5%
- 4. When passing \$1.2M milestone, there will be an additional discount of 6% (maximum)