



REPORT	
Codon Optimization Service	
Insert:	pXXXXXXXXXX
Vector Backbone:	NTCXXXX

Customer:	XXXXXX	Street:	XXXXXXXX
PO#:	XXXXXX	City:	XXXXXXXX
Date:	XX/XX/XXXX	Phone:	XXXXXXXX

Codon Optimization Parameters	Specification
Vector Backbone/Targeting	NTCXXXX
Insert	pXXXXXXXXXX
Codon Optimization (species)	XXXXXXXX
Flanking 5' Restriction Site ( <i>Sal</i> I default)	XXXXXXXX
Flanking 3' Restriction Site ( <i>Bgl</i> II default)	XXXXXXXX
Internal Excluded Enzyme Sites	<i>Sal</i> I, <i>Bgl</i> II, <i>Xho</i> I, <i>Eco</i> RI, <i>Aar</i> I, <i>Sap</i> I
Core Sequences to be Excluded	GCTGGTGG GTTGTAAAC AACNNNNNNGTGC AATAAA ATTA TATAWAW TTAGGG GCCGTCTGAA AAGTGC GGT ACAAGCGGTC Under represent AGG codon PABP sites (polyA =aaaaa)
Additional Project-specific Excluded Sequences	XXXXXXXX
Core Sequences to be Included	TGA TAA tandem stop codons
Additional Project-specific Included Sequences	XXXXXXXX
Codon Optimization Vendor (program)*	XXXXXXXX

\*default: GeneArt

Gene Synthesis Project Summary	Report	Comments
Translate in six frames (FYI) (VectorNTI)	Attach Report	
Translate ATG-TAA and align predicted protein with customer provided protein sequence (Vector NTI)	Verify 100% Match	
Vendor (default: GeneArt)	XXXXXXXX	
Price	\$XXXX	
Estimated Synthesis Date	XX/XX/XXX	

Comments:

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**REPORT**

**Codon Optimization Service**

Insert: pXXXXXXXXXXXX

Vector Backbone: NTCXXXX

Codon Optimized Gene Analysis	Program	Result	Comment	Weblink
5' end secondary structure (vector spliced leader + 100 bp synthetic gene)	mFold	Pass		<a href="#">Weblink</a>
Cryptic Splice sites	Spliceport	Pass		<a href="#">Weblink</a>
Human Genome homology	Blast: Megablast	No significant homology found		<a href="#">Weblink</a>
Human Genome homology	Blast: BlastN	XXXXXXXXXXXXXXXXXXXX		<a href="#">Weblink</a>
Bacterial promoters	BPROM	No strong promoters		<a href="#">Weblink</a>
Eukaryotic promoters (Softberry)	TSSG	None detected		<a href="#">Weblink</a>
Inverted Repeats	einverted	None detected		<a href="#">Weblink</a>
Palindromes	palindrome	None detected		<a href="#">Weblink</a>
Repeats	Repeats 1.1	None detected		<a href="#">Weblink</a>
Tandem Repeats	equicktandem	None detected		<a href="#">Weblink</a>
Tandem Repeats	etandem	None detected		<a href="#">Weblink</a>
Z-DNA	Z-Hunt	None detected		<a href="#">Weblink</a>
DNA cruciforms	WebSIDD	None detected		<a href="#">Weblink</a>
PolyA	polyadq	None detected		<a href="#">Weblink</a>
G quadruplex (FYI)	QGRS mapper	XXXXXXXXXXXXXXXXXXXX		<a href="#">Weblink</a>
G quadruplex (FYI)	Quadruplex. org	None detected		<a href="#">Weblink</a>
Nucleosome positioning (DNA bending/nucleosome exclusion) (FYI)	NXSensor	None detected		<a href="#">Weblink</a>
Alternative Frame Peptides	BlastP	None detected		<a href="#">Weblink</a>

Quality Control:

Date:

Reviewed by:

Date: