



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

Quality Control:

Date:

Reviewed by:

Date: