

mRNA Information

DNA Template Source:

- Provided by customer* Provided by Eurofins Genomics

Template DNA length: _____ **Target mRNA length:** _____

DNA Template Type:

- Circular Plasmid
 PCR Product

If plasmid, what restriction enzyme to linearize your template: _____

Total number of cut sites for this enzyme in your template: _____

**Note: ≥ 50ug of DNA template will be required for mRNA production.*

Does the DNA template contain a T7 promoter?

- Yes. If so, please provide the T7 promoter sequence: _____
 No, add the following T7 promoter to the template: _____
5'TAATACGACTCACTATAAGG...3'

Does the DNA template contain a 5'UTR and 3'UTR?

- Yes No

If yes, please copy and paste your UTR sequences:

5' UTR: _____

3' UTR: _____

If no, please choose which UTRs you want for your templates:

- HBB gene 5' and 3'UTRs
 HBA1 gene 5' and 3'UTRs
 If you prefer other UTRs, please provide the sequences:

5'UTR: _____ 3'UTR: _____

Adding Kozak sequence [GCCGCCACC] after 5'UTR and before start codon:

- Yes No

Kozak sequence is essential for the RNA for expression in eukaryotes.

mRNA Synthesis and Purification

5' Cap structure: Yes (Default Cap1) None

Poly A tail: 50nt 100nt None

Modifications:

- None
- Pseudouridine (100% substitution)
- N1-me-pseudouridine (100% substitution)
- 5-methoxyuridine (100% substitution)
- 5-me-Cytidine (100% substitution)

Purification:

- Silica membrane-based method (Default)
- Other: _____

Storage Buffer: Nuclease-free water 1mM Sodium citrate, pH6.4

mRNA scale:

- 100ug (Default)
- 150ug
- 200ug

Concentration adjustment:

- No (typically 0.5-1mg/ml)
- Yes ____mg/ml (Fees may apply)

QC

Standard mRNA QC

- Visual Appearance.
- mRNA Concentration and purity using nanodrop.
- mRNA size, integrity and purity using PAGE or agarose gel.
- pH value using pH meter.

Additional mRNA QC Items with extra fee:

- Capping efficiency by TBE-Urea gel analysis
- mRNA length by CE + size-based integrity by CE
- Endotoxin test by LAL

mRNA 1
mRNA Name:
ORF from the ATG start codon to the stop codon (TAA, TAG or TGA):
mRNA 2
mRNA Name:
ORF from the ATG start codon to the stop codon (TAA, TAG or TGA):
mRNA 3
mRNA Name:
ORF from the ATG start codon to the stop codon (TAA, TAG or TGA):
mRNA 4
mRNA Name:
ORF from the ATG start codon to the stop codon (TAA, TAG or TGA):
mRNA 5
mRNA Name:
ORF from the ATG start codon to the stop codon (TAA, TAG or TGA):
mRNA 6
mRNA Name:
ORF from the ATG start codon to the stop codon (TAA, TAG or TGA):
mRNA 7
mRNA Name:
ORF from the ATG start codon to the stop codon (TAA, TAG or TGA):