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| **IVT mRNA quotation request form** | |
| **Customer Information** | |
| **Company:** | |
| **Contact Person:** | |
| **Phone:** | **Email:** |
| **Shipping Address:** | |
| **mRNA Information** | |
| **mRNA Name:** | |
| **DNA Template Source:** ☐ Provided by customer\* ☐ Provided by Blue Heron | |
| **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: ≥ 20ug of DNA template will be required for mRNA production.  **Does the mRNA 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 mRNA 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: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
| **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 | |

**Please provide your ORF sequences:**

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| **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): |
| **mRNA 8** |
| mRNA Name: |
| ORF from the ATG start codon to the stop codon (TAA,TAG or TGA): |