**mRNA custom Service Information**

**Contact Information**

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| **Company or Institution：** | Gentaur |
| **Department：** | Virology, Antiviral Drug & Vaccine Research Group |
| **Name：** | Lieven Gevaert |
| **Job Title：** | Bio Engineer & CEO, Gentaur Genprice |
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| **Delivery Address：** | Voortstraat 49, 1910 Kampenhout, Belgium |
| **Date Ordered/Quote：** | 11/09/2024 |
| **Custom Product Name** | **Autoimmune ifn mouse** |
| **Application Scenario** | Autoimmune model |

**Custom Product Information**

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| **Basic Requirements Information** | |
| **Custom Product Name** | **Mouse Autoimmune IFN Vaccin** |
| **Required Service** | Please choose which services you would like us to provide according to the actual requirements：  A.Sequence Design  B.Gene Synthesis  C.Plasmid Amplification  D.mRNA Synthesis（Provide basic quality control：OD260/280,mRNA Integrity,Formaldehyde Gel Electrophoresis）  E.LNP Encapsulation（Provide basic quality control：OD260/280,mRNA Integrity,Formaldehyde Gel Electrophoresis,LNP Encapsulation Rate,LNP Particle Size,PDI）  F.Capping Efficiency Detection  G.Poly（A) Distribution Detection  H. Detection of mRNA Translation in Cell  I.In Vivo Expression Verification  J.Cellular Immunity Test  K.Humoral Immunity Test |
| **Required of Sequence Design**  **（No need to fill in if the service is not selected）** | **How many antigens do you need 1 mRNA strand to express：**  1 antigen Multiple antigens |
| Total amino acid length of 1 or more of the selected antigens **35** |
| **How many candidate sequences do you want to output（For POC Service）：**  5 10 Other 3 |
| **How many candidate sequences do you want to synthesis（For POC Service）：3**  1 2 Other |
| **Gene Synthesis**  **（No need to fill in if the service is not selected）** | I don’t have plasmid template sequence, synthetic refer to the sequence design requirements；  I have plasmid template sequence, synthetic refer to the sequence design requirements,target sequence length bp； |
| **Plasmid Amplification**  **（No need to fill in if the service is not selected）** | Amplify mg plasmid,linearization enzyme ,plasmid template design for（co-transcriptional capping orpost-transcriptional capping）,resistance of plasmid ； |
| **mRNA Synthesis**  **（No need to fill in if the service is not selected）** | **Final Yield** mg ； |
| **The size of mRNA** nt； |
| **Type of Plasmid template supplied by customer**：  cyclic plasmid templates,linearization enzyme ,plasmid template design for（co-transcriptional capping orpost-transcriptional capping）；  linearized plasmids templates,template design for（co-transcriptional capping orpost-transcriptional capping）； |
| **Modified Nucleotide：**  UTP N1-Me-pUTP pUTP Other |
| **mRNA grade：** Research Grade Industrial Grade |
| **Concentration**\_\_\_\_\_\_\_\_\_\_\_ |
| **Buffer：**Nuclease-Free Water  1 mM Sodium Citrate Other\_\_\_\_\_\_\_\_\_\_ |
| **Capping：**  co-transcriptional capping（3-OH AG(cap1)）  co-transcriptional capping（3-OMe AG(cap1) ）  post-transcriptional capping |
| **Need to poly(A) tailing：**no  yes |
| **LNP Encapsulation**  **（No need to fill in if the service is not selected）** | **Structure of Encapsulated RNA：**line circle Other |
| **Final Yield** mg LNP**；** |
| **The size of RNA 160** nt**；** |
| **Type of Ionizable Lipids：**ALC-0315 SM102 |
| **Concentration：**100-150ug/mL Other\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **Buffer：**supplied by Hzymes  PBS+Sucrose  supplied by Hzymes  Other\_\_\_\_\_\_\_\_\_\_ |
| **mRNA QC Requirements Information** | |
| **Basic QC** | OD260/280 Formaldehyde Gel Electrophoresis   mRNA Integrity： CE  HPLC |
| **Optional QC** | dsRNA Total Protein Residue Detection  Plasmid template Residue Detection HCP Residue Detection  HCD Residue Detection  Endotoxin  RNase Residue Detection  DNase Residue Detection  NTP Residue Detection Other\_\_\_\_\_\_\_\_\_\_ |
| **LNP QC Requirements Information** | |
| **Basic QC** | LNP Encapsulation Rate LNP particle Size  PDI Concentration |
| **Optional QC** | Sterility Detection Endotoxin Detection  ☐In vitro Expression Verification：(☐Western blot；☐fluorescence microscope；  ☐ELISA；☐IF；☐Other\_\_\_\_\_\_\_\_)  ☐In Vivo Verification：(☐In Vivo Expression Verification；☐Cellular immunity；☐Humoral immunity；☐Other\_\_\_\_\_\_\_\_) |
| **Other Requirements** | |
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| **Sequence Information** | |
| 1. Please provide sequence of the 50nt after the T7 promoter if you selected Capping Efficiency Detection. 2. Please provide sequence of Poly(A) and 20nt before the Poly(A) if you selected Poly（A) Distribution Detection. 3. Please provide sequence of the plasmid templates if Plasmid template supplied by customer. | |