Our Offer: Custom mRNA Synthesis by baseclick

Up to 9 mg of highly pure mRNA
baseclick is ISO 9001–certified and produces mRNA under stringent quality standards. GMP-grade enzymes, high-purity NTPs, and an optimized T7 RNA polymerase system ensure efficient transcription and reproducible RNA quality at scales up to
5-9 mg mRNA depending on construct sequence.

Customized mRNA constructs
Your mRNA can be synthesized with natural nucleotides or as immune suppressing variant, where uridine is substituted with pseudouridine (Ψ), N1-methyl-pseudouridine ($m^1\Psi$), or 5-ethynyl-uridine(5-EU). Various 5'-capping options, including CleanCap and ARCA, are available to support efficient translation.

Exclusive portfolio of modified nucleotides
Azide- or alkyne-functionalized nucleotides can be introduced at the 5' and/or 3' end to enable site-specific conjugation via click chemistry.

Click-chemistry conjugation services
Post-synthetic conjugation of your mRNA with fluorescent dyes, targeting ligands, or affinity tags is offered for applications in research, diagnostics, and therapeutic development.

Expert guidance for your project
Scientific support by baseclick´s expert team is available for the design and optimization of mRNA constructs for screening, functional analyses, and translational studies.

Applications

baseclick's mRNA synthesis service is suitable for a broad range of applications, including:

- **Research:** cellular uptake analyses, fluorescence *in situ* hybridization (FISH), and reporter gene assays
- **Diagnostics:** RNA probes for molecular imaging
- **Therapeutics:** cancer immunotherapy, protein replacement, and gene-editing approaches
- **Vaccine development:** mRNAs encoding viral or tumor-associated antigens

*Please note the following requirements regarding the plasmid DNA template for our mRNA service:

To Be Provided by the Customer	mRNA Service by baseclick	Template Sequence Requirements	Required Amount and Concentration of the dsDNA template
A dsDNA plasmid	Plasmid linearization, mRNA synthesis by IVT, and product purification.	The template must contain a T7 promoter in the correct orientation (consensus sequence: TAATACGACTCACTATAGGG).	To produce 100 µg of mRNA, unmodified or modified, from 10 µg to >30 µg constructs of dsDNA template is needed.
Linearized plasmid dsDNA	mRNA synthesis by IVT and product purification.	The template must contain a T7 promoter in the correct orientation (consensus sequence: TAATACGACTCACTATAGGG).	To produce 100 µg of mRNA, unmodified or modified, from 1 µg to >5 µg constructs of dsDNA template is needed. A minimum dsDNA template concentration of 135 ng/µL is required.

Learn more at baseclick.eu