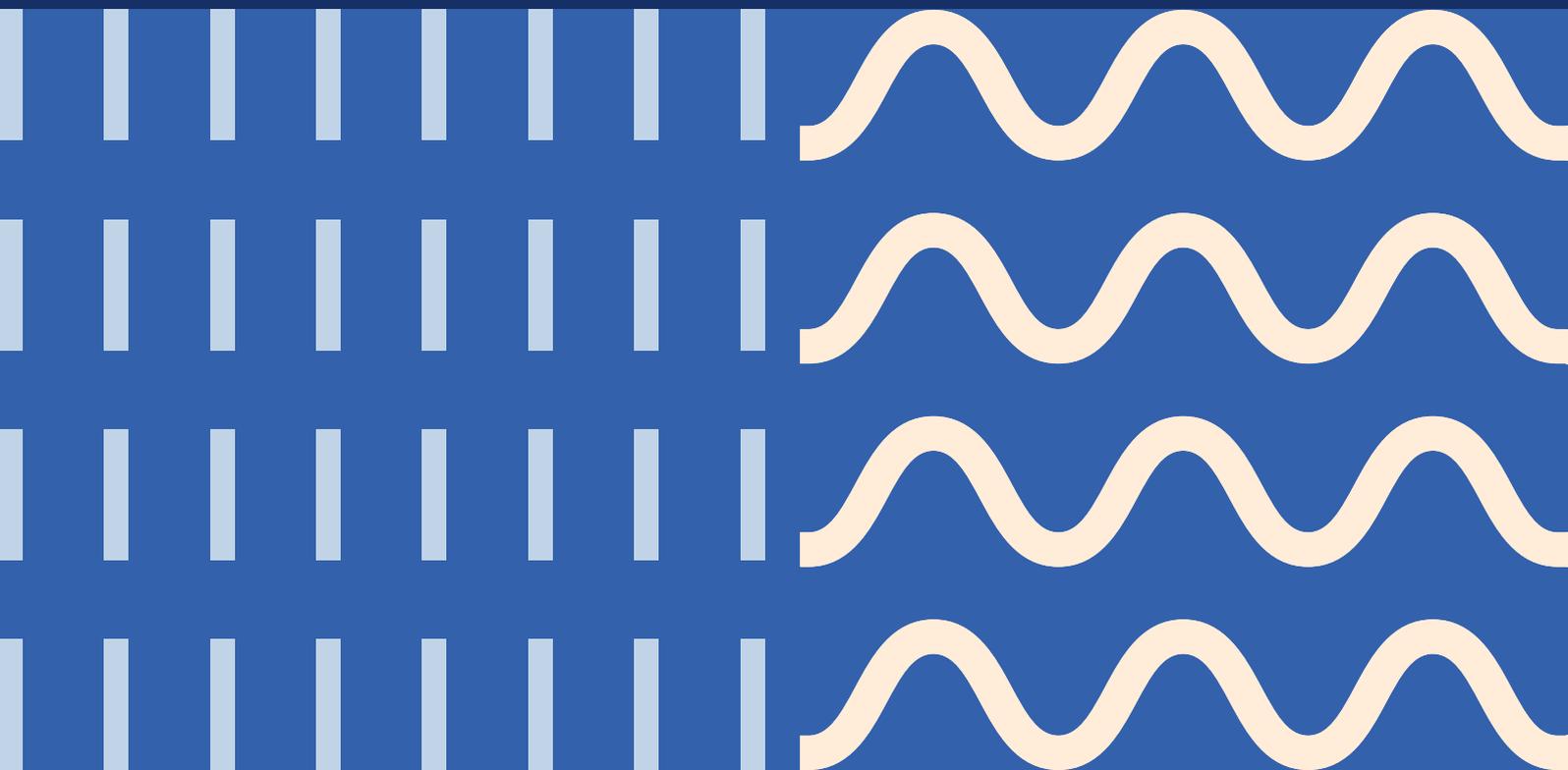




# mRNA Synthesis Reagents

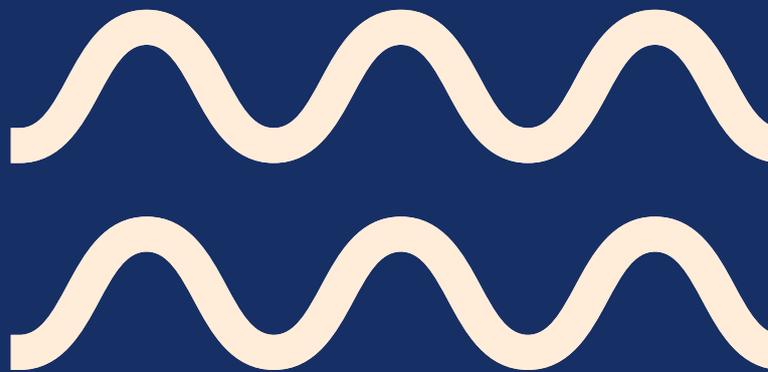
Product Catalog

mRNA Synthesis Reagents 2026 Edition | Version 3.0



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# Schematic Diagram of mRNA Synthesis

## Template Preparation

### Template Types

#### Plasmid DNA

#### Synthetic DNA Purified PCR Products

#### Linearization

- Purified Plasmid DNA
- Restriction enzyme
- Reaction buffer
- BSA free

#### Our Products

- BspQI restriction enzyme
- Reaction buffer

## In Vitro Transcription

#### Optional

##### Pyrophosphatase

Enhance RNA yield by hydrolyzing reaction byproducts.

##### Cap Analog

For co-transcriptional capping.

##### Post Reaction

DNase treatment to remove template.

- T7/SP6 RNA polymerase
- Reaction buffer
- NTP or modified NTP
- Linear DNA template
- RNase inhibitor
- DTT

- T7 RNA polymerase
- 10X IVT reaction buffer
- NTP or modified NTP
- Inorganic pyrophosphatase (yeast)
- RNase inhibitor
- DNase I (RNase-free)
- 10X DNase I reaction buffer
- High yield T7 RNA synthesis kit
- High yield SP6 RNA synthesis kit
- Cap Analogs

## 5' End Capping

GTP for GMP addition and S-adenosylmethionine (SAM) as the methyl donor are essential substrates in 5' end capping reaction.

- Uncapped IVT RNA
- Capping enzymes
- Reaction buffer
- GTP (guanosine triphosphate)
- SAM (S-adenosylmethionine)
- RNase inhibitor

- Vaccinia capping enzyme
- mRNA cap mRNA cap 2'-O-methyltransferase
- 10X capping buffer
- S-adenosylmethionine (SAM)
- 10 mM GTP

## 3' Poly(A) Tailing

ATP for adenine addition and Poly(A) polymerase as the catalytic enzyme are essential components in 3' poly(A) tailing reaction.

- IVT RNA
- Poly(A) polymerase
- ATP
- Reaction buffer
- RNase inhibitor

- Poly(A) polymerase
- 10X poly(A) polymerase reaction buffer
- ATP, 100mM solution
- RNase inhibitor

# Custom mRNA

## High-Quality mRNA Means More Than Meeting Purity Thresholds

High-performing mRNA products need to meet more than just baseline purity criteria. For consistent expression in eukaryotic systems, mRNA must show high integrity and include a properly formed cap structure at the 5' end and a poly(A) tail of proper length at the 3' end. The presence of a certain cap structure supports efficient translation, helps limit degradation and reduces innate immune activation. Trace contaminants such as dsRNA or endotoxin can inhibit translation, yet these often go unmonitored.

Custom mRNA can be manufactured under cGMP-controlled conditions or for RUO depending on the project. Hongene applies strict QC thresholds across all synthesis and purification steps, enabling confident progression from discovery to clinical development.

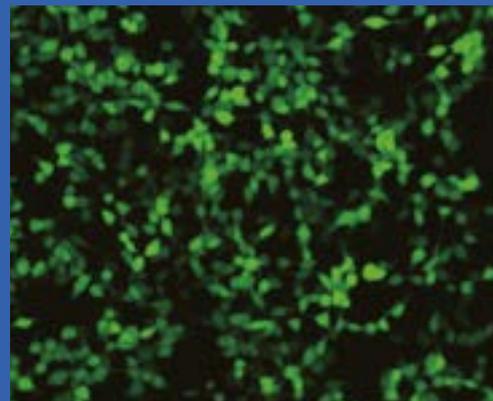
### Key Features

- Integrity: >90% full-length mRNA
- 5' end capping
- Capping efficiency: up to 99.8%
- 100 nt poly(A) tail added at 3' end
- OD ratios: A260/A280 = 1.8–2.0; A260/A230 >2.0
- Endotoxin: <1 EU/mg RNA
- dsRNA content: <0.002%
- Available with multiple modified nucleotides
- CDMO Services Available

Contact [info@hongene.com](mailto:info@hongene.com) to get the “Product Requirement Document” for mRNA Synthesis Service, and to customize your mRNA.

### Available Quality Checks

- mRNA size and sequencing
- Cap identity
- Capping efficiency
- Poly(A) tail length
- Modified base identity
- Residual NTP, SAM, SAH
- Residual enzymes, solvents, host cell protein or DNA
- Bioburden and endotoxin
- Final concentration
- More...



### Functional Validation: eGFP Expression

Expression of eGFP was demonstrated by transfecting 2.5 µg of mRNA into  $1 \times 10^6$  HEK293T cells. Fluorescence was confirmed 24 hours post-transfection using microscopy.

# Type IIs Restriction Endonuclease for Plasmid Linearization

## BspQI (BSA-Free)

BspQI is a type IIs restriction endonuclease cloned from *Bacillus sphaericus*. It recognizes the sequence 5'-GCTCTTCN<sub>1</sub>/N<sub>4</sub>-3' and cleaves outside the recognition site:



Linearizing plasmid DNA at a defined restriction site ensures consistent transcript termination. Type IIs restriction enzymes such as BspQI are widely used because they do not add extra bases at the cleavage site. This allows for a clean 3' end with no overhang — ideal for producing polyadenylated transcripts with fewer unintended byproducts.



## Key Feature

Free of endotoxins, and animal/protein-derived components, making it suitable for sensitive in vitro and in vivo workflows.

## Storage:

BspQI can be stored with or without BSA at -20°C. Avoid exposure to frequent temperature changes and repeated freeze-thaw cycles. The enzyme retains full activity for at least one year when stored under recommended conditions.

## Order Information

Cat. No.	Description	Amount	Storage
ON-124	BspQI	10 KU	-20°C
ON-268	10X Cut Buffer	5 mL	-20°C

## Product Details

### Unit Definition

One unit is defined as the amount of enzyme required to digest 1µg of Lambda DNA in 1 hour at 50°C in a total reaction volume of 50 µL

### Concentration

10,000 U/mL

### Reaction Temperature

37-50°C

### Heat Inactivation

80°C for 20 min

### Storage Buffer (pH 7.0 @ 25°C)

- 20 mM Tris-HCl
- 1 mM DTT
- 0.1 mM EDTA
- 500 mM KCl
- 0.1% Triton X-100 (v/v)
- 50% Glycerol (v/v)

### Reaction Buffer

#### 10X Cut Buffer

(BSA-free, pH 7.9 @ 25°C)

- 500 mM Tris-HCl
- 1000 mM NaCl
- 100 mM MgCl<sub>2</sub>
- 10 mM DTT

# T7 RNA Polymerase

**T7 RNA polymerase** is a DNA-dependent RNA polymerase derived from bacteriophage. It catalyzes transcription in the 5' to 3' direction, using a specific T7 promoter sequence to initiate synthesis.

## T7 Promoter

+1

**5'-TAATACGACTCACTATAGGG-3'**  
**3'-ATTATGCTGAGTGATATCCC-5'**

The enzyme is expressed as a monomer of 883 amino acids, with a molecular weight of approximately 99 kDa. It is well suited for generating full-length RNA in a variety of applications, including preclinical development, probe generation, and mechanistic RNA studies.

## Applications

- IVT of RNA templates for translation or structure-function studies
- Synthesis of radiolabelled or fluorescent RNA probes
- Production of modified RNA for research or screening purposes

## Key Features

- Produce high yields with natural NTPs as well as modified ones
- Capping efficiency >95% when transcribing with a cap analog
- Provide customized concentration to meet special requirements

## Order Information

Cat. No.	Description	Amount	Storage
ON-004	T7 RNA polymerase	10 KU	-20°C
ON-062	10X IVT reaction buffer	5 mL	-20°C

## Relevant Products

Cat. No.	Description	Amount	Storage
R1331	ATP, 100 mM Sodium Solution	1 mL	-20°C
R2331	CTP, 100 mM Sodium Solution	1 mL	-20°C
R3331	GTP, 100 mM Sodium Solution	1 mL	-20°C
R5331	UTP, 100 mM Sodium Solution	1 mL	-20°C

## Product Details

### Unit Definition

One unit incorporates 1 nmol of ATP into acid-insoluble material in 1 hour at 37°C (20 µL total volume)

### Concentration Options

50,000 U/mL  
200,000 U/mL  
1,000,000 U/mL

### Storage Buffer (pH 7.9 @ 25°C)

- 50 mM Tris-HCl
- 100 mM NaCl
- 10 mM DTT
- 0.1% Triton X-100 (v/v)
- 1 mM EDTA
- 50% glycerol (v/v)

### 10X IVT Reaction Buffer (pH 7.9 @ 25°C)

- 400 mM Tris-HCl
- 100 mM DTT
- 20 mM Spermidine
- 60 mM MgCl<sub>2</sub>

### Capping Performance: Cotranscriptional 5'-Capping

Transcripts generated with and without cap analogs were hybridized to DNA probes and digested with RNase H. Purified 5' ends were analyzed by HPLC. When using compatible cap analogs, T7 RNA polymerase achieved capping efficiencies >95%.

# T7 Polymerase Kit

## High Yield T7 RNA Synthesis Kit

The **High yield T7 RNA synthesis kit** is optimized for efficient in vitro transcription (IVT), producing up to 25 times more full-length RNA than standard T7 reactions. Yields can reach up to 210 µg of RNA per reaction, depending on template and reaction conditions.

### Applications

- IVT of RNA for research or preclinical studies
- Guide RNA (gRNA) synthesis for genome editing platforms
- Incorporation of fluorescent or radiolabelled nucleotides
- Synthesis of base-modified RNA
- One-step capped mRNA synthesis using cap analogs

### Order Information

Cat. No.	Description	Amount	Storage
ON-040	High yield T7 RNA synthesis kit	50 reactions	-20°C

### Relevant Products

Cat. No.	Description	Storage
ON-598	m7G(5')pppA(2'OEt)pG ( <b>HiXCap™ E1</b> )	-20°C
ON-587	(3'OMe)m7G(5')pppA(2'OEt)pG ( <b>HiXCap™ E2</b> )	-20°C
ON-797	(3'OMe)m7G(5')pppA(2'OEt)pApG ( <b>HiXCap™ E3</b> )	-20°C

## Workflow Overview

### ○ Template Plasmid

BspQI Linearization

### ○ Linearized Template

NTPs

Reaction buffer

Enzyme Mix

RNase-free water

### ○ Crude RNA

DNase I digestion

### ○ Crude RNA without template

Cleanup

### ○ RNA Precipitation

### ○ Purified RNA

Dilution

### ○ QC

# SP6 Polymerase Kit

## RNA Synthesis Using SP6 RNA Polymerase - An Alternative to T7

**SP6 RNA polymerase** is a DNA-dependent RNA polymerase expressed recombinantly and cloned from *Salmonella typhimurium* LT2Z. It specifically initiates transcription from the Sp6 promoter sequence.

### Sp6 Promoter

5'-ATTTAGGTGACACTATAG<sup>+1</sup>GAA-3'  
3'-TAAATCCACTGTGATATCTT-5'

As an alternative to T7-based systems, this enzyme is particularly useful for projects requiring flexibility in vector design or compatibility with existing Sp6-driven workflows.

**High yield SP6 RNA synthesis kit** - This kit supports transcription of up to 80 µg of full-length RNA per reaction. With reaction efficiency-optimized design, the kit reduced consumption of enzyme and NTPs (compared with standard Sp6 protocols). This kit includes reagents for transcription, template removal, purification, and electrophoresis analyses.

## Product Details

### Unit Definition

One unit catalyzes the incorporation of 1 nmol of ATP into acid-insoluble material in 1 hour at 37°C (20 µL total reaction volume)

### Concentration

20,000 U/mL

### Storage Buffer (pH 7.9 @ 25°C)

- 50 mM Tris-HCl
- 100 mM NaCl
- 10 mM DTT
- 0.1% Triton X-100 (v/v)
- 1 mM EDTA
- 50% glycerol (v/v)

## Applications

- IVT of RNA
- Probe generation with radiolabelled or fluorescent bases
- Structure-function and mechanistic studies of RNA

## Key Features

- Compatible with both natural and modified nucleotides
- >95% co-transcriptional capping efficiency with appropriate cap analogs
- High yield with reduced reagent consumption

## Order Information

Cat. No.	Description	Amount	Storage
ON-338	High yield SP6 RNA synthesis kit	50 rxns	-20°C
ON-109	DNase I (RNase-free)	1 KU	-20°C
ON-297	10X DNase I reaction buffer	2 KU	-20°C/-70°C

# Inorganic Pyrophosphatase (Yeast)

Inorganic pyrophosphatase (yeast) is a recombinant enzyme derived from *Saccharomyces cerevisiae* and expressed in *E. coli*. It is a homodimer with subunits of approximately 32–35 kDa each.

The enzyme catalyzes the hydrolysis of inorganic pyrophosphate (PPi) into orthophosphate (Pi):



During IVT, pyrophosphate accumulates as a byproduct and can bind free  $\text{Mg}^{2+}$  ions, reducing their availability and lowering RNA yield. The addition of Inorganic pyrophosphatase (yeast) drives the reaction forward by breaking down PPi and preventing magnesium sequestration.

## Product Details

### Unit Definition

One unit generates 1  $\mu\text{mol}$  of phosphate per minute from inorganic pyrophosphate under standard reaction conditions

### Concentration

100 U/mL

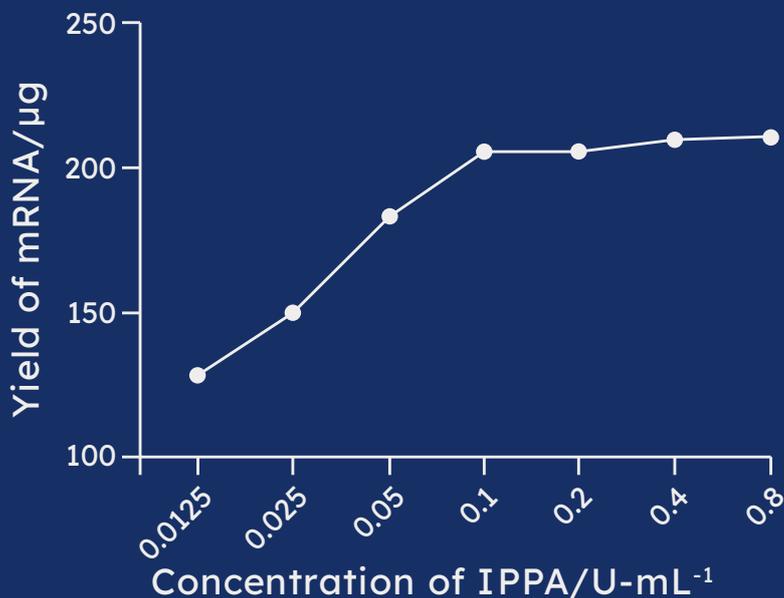
### Reaction Temperature

37–50°C

### Storage Buffer (pH 8.0 @ 25°C)

- 20 mM Tris-HCl
- 1 mM DTT
- 0.1 mM EDTA
- 50% glycerol (v/v)

## Performance Data — Transcription Yield



In a 20  $\mu\text{L}$  IVT reaction, adding Inorganic pyrophosphatase (yeast) at concentrations between 0.0125–1 U/mL improved RNA yield. This enhancement is attributed to removal of pyrophosphate and preservation of free magnesium.

## Order Information

Cat. No.	Description	Amount	Storage
ON-025	Inorganic pyrophosphatase (yeast)	10 KU	-20°C

## Relevant Products

Cat. No.	Description	Storage
ON-040	High yield T7 RNA synthesis kit	-20°C
ON-004	T7 RNA polymerase	-20°C
ON-126	Poly(A) polymerase	-20°C
ON-179	Alkaline phosphatase, TAB5	-20°C

# DNase I

## For DNA Template Digestion

**DNase I** is a nonspecific endonuclease that cleaves both single- and double-stranded DNA. It produces a mixture of di-, tri-, and oligonucleotides with 5'-phosphate and 3'-hydroxyl ends.

In mRNA production workflows, DNase I is used after IVT to degrade residual DNA template, helping to ensure purity and regulatory compliance.

### Applications

- Removal of plasmid or linear DNA templates following IVT

### Order Information

Cat. No.	Description	Amount	Storage
ON-109	DNase I (RNase-free)	1000 U	-20°C
ON-077	10X DNase I reaction buffer	1 mL	-20°C

### Product Details

#### Unit Definition

One unit is defined as the amount of enzyme that will completely degrade 1 µg of Lambda DNA in a total reaction volume of 50 µL in 10 minutes at 37°C

#### Concentration

1,000 U/mL

#### Storage Buffer (pH 7.5 @ 25°C)

- 50 mM Tris-HCl
- 10 mM CaCl<sub>2</sub>
- 50% glycerol (v/v)

#### 10X DNase I Reaction Buffer (pH 7.6 @ 25°C)

- 100 mM Tris-HCl
- 25 mM MgCl<sub>2</sub>
- 5 mM CaCl<sub>2</sub>

### Product Details

#### Unit Definition

One unit is defined as the amount of enzyme required to inhibit by 50% the activity of 5 ng of ribonuclease A

#### Concentration

40,000 U/mL

#### Storage Buffer (pH 7.6 @ 25°C)

- 20 mM HEPES-KOH
- 50 mM NaCl
- 8 mM DTT
- 50% glycerol (v/v)

# RNase Inhibitor

## For Preventing RNA Degradation

RNase inhibitor is a ~50 kDa recombinant protein that forms a 1:1 complex with RNase A-type enzymes, including RNase A, B, and C. It is not active against RNase I, RNase T1, RNase H, S1 nuclease, or enzymes such as reverse transcriptase and T7 RNA polymerase. With a  $K_i$  in the 10<sup>-14</sup> M range, this inhibitor is used to protect RNA from degradation in workflows including IVT, cDNA synthesis, and enzymatic RNA labeling.

### Applications

- IVT and translation
- Enzymatic RNA labeling
- First-strand cDNA synthesis

### Order Information

Cat. No.	Description	Amount	Storage
ON-039	RNase inhibitor	40 KU	-20°C

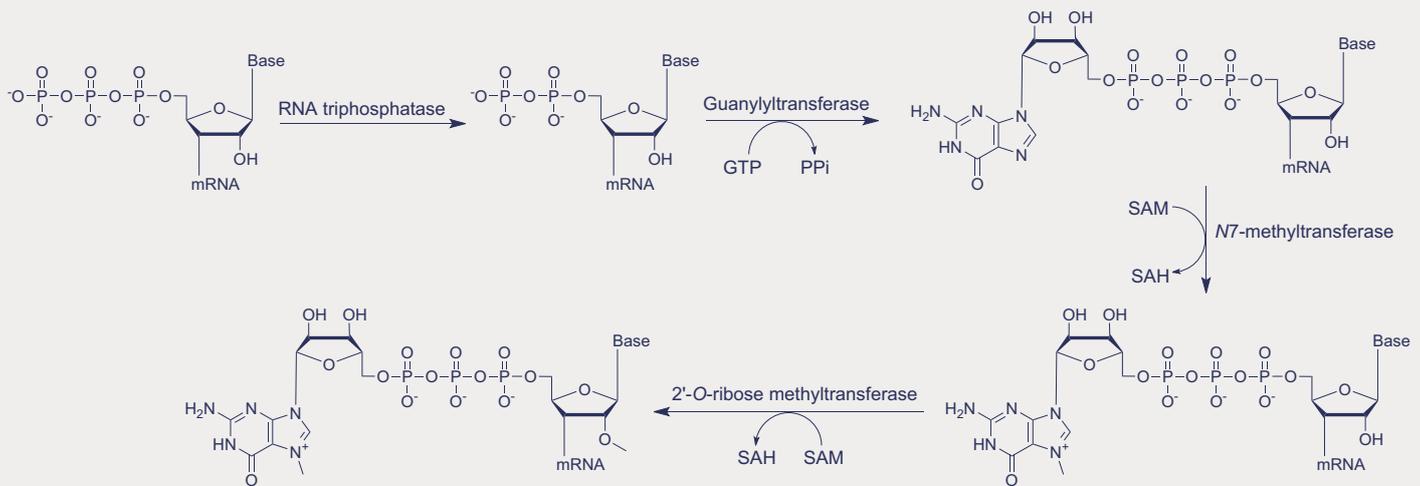
# Vaccinia Capping Enzyme

Vaccinia capping enzyme is a recombinant heterodimeric protein derived from vaccinia virus. It catalyzes the formation of a natural Cap0 structure by adding a 7-methylguanylate to the 5' triphosphate end of RNA. This cap enhances stability, and promotes efficient translation in eukaryotic cells.

The enzyme complex contains two subunits (approx. 95 kDa and 31 kDa) and exhibits the following activities:

- RNA triphosphatase
- RNA guanylyltransferase (GTase)
- RNA (guanine-7)-methyltransferase

In vitro, capping is achieved in the presence of GTP, S-adenosylmethionine (SAM), and the supplied buffer. When paired with mRNA cap 2'-O-methyltransferase, Cap1 structures can also be generated.



Add 5'-cap by Vaccinia capping enzyme

## Product Details

### Unit Definition

One unit incorporates 10 pmol of GTP into an 80 nt RNA transcript in 1 hour at 37°C

### Concentration

10,000 U/mL

### Storage Buffer (pH 8.0 @ 25°C)

- 20 mM Tris-HCl
- 0.1 mM EDTA
- 100 mM NaCl
- 1 mM DTT
- 0.1% Triton X-100 (v/v)
- 50% glycerol (v/v)

### 10X Capping Buffer (pH 8.0 @ 25°C)

- 500 mM Tris-HCl
- 50 mM KCl
- 10 mM MgCl<sub>2</sub>
- 10 mM DTT

### Basic Protocol

1. Heat RNA at 65°C for 5 minutes, then cool on ice for 5 minutes
2. Prepare a 20 µL reaction mix (mRNA cap mRNA cap 2'-O-methyltransferase may be added if Cap1 is desired)
3. Incubate at 37°C for 30 minutes

## Ordering Information

Cat. No.	Description	Amount	Storage
ON-028	Vaccinia capping enzyme	50 KU	-20°C
ON-074	S-adenosylmethionine (SAM)	1 mL	-20°C
ON-075	10 mM GTP	1 mL	-20°C

## Relevant Products

Cat. No.	Description	Amount	Storage
ON-014	mRNA cap mRNA cap 2'-O-methyltransferase	50 KU	-20°C

## Applications

- Addition of a natural Cap0 structure to in vitro transcribed RNA
- 5' end labeling for RNA tracking or analysis
- Co-capping with mRNA cap mRNA cap 2'-O-methyltransferase to produce Cap1 mRNA

# 2'-O-Methyltransferase

## Capping Enzyme

This recombinant enzyme, derived from vaccinia virus, catalyzes the methylation of the ribose 2'-hydroxyl group on the first nucleotide after triphosphate (N of m7GpppN) cap structure. The result is a Cap1 RNA, which more closely resembles endogenous eukaryotic mRNA.

Cap1 structures demonstrated reduced immunogenicity and improved translational efficiency in systems such as microinjection or transfection. The reaction requires a methyl donor (S-adenosylmethionine, SAM) and a properly capped RNA substrate.

## Applications

- Conversion of Cap0 RNA to Cap1
- Improving translation efficiency in transfection experiments
- Reducing immune detection synthetic mRNA

## Product Details

### Unit Definition

One unit methylates 10 pmol of 80 nt Cap0 RNA in 1 hour at 37°C

### Concentration

50,000 U/mL

### Reaction Temperature

- 37-50°C

### Storage Buffer (pH 8.0 @ 25°C)

- 50 mM Tris-HCl
- 0.1 mM EDTA
- 100 mM NaCl
- 1 mM DTT
- 0.1% Triton X-100 (v/v)
- 50% glycerol (v/v)

### 10X Capping Buffer (pH 8.0 @ 25°C)

- 500 mM Tris-HCl
- 50 mM KCl
- 10 mM MgCl<sub>2</sub>
- 10 mM DTT

## Ordering Information

Cat. No.	Description	Amount	Storage
ON-014	mRNA cap mRNA cap mRNA cap 2'-O-methyltransferase	50 KU	-20°C
ON-074	S-adenosylmethionine (SAM)	1 mL	-20°C

# Poly(A) Polymerase

**Poly(A) polymerase** catalyzes the addition of adenosine monophosphate to the 3'-hydroxyl end of RNA molecules in a template-independent manner. The enzyme uses ATP as its nucleotide substrate and supports efficient tailing of transcripts for improved stability and translation.

Addition of a defined poly(A) tail is often required for eukaryotic translation and can also be leveraged for RNA labeling techniques when modified nucleotides are included in the reaction.

## Applications

- Addition of poly(A) tails to IVT transcripts
- Enhancement of mRNA stability and translational efficiency
- RNA labeling using fluorescent or radiolabeled ATP analogs

## Ordering Information

Cat. No.	Description	Amount	Storage
ON-126	Poly(A) polymerase	5000 U	-20°C
ON-127	10X Poly(A) polymerase Reaction Buffer	1 mL	-20°C
R1331	ATP, 100mM solution	1 mL	-20°C

## Relevant Products

Cat. No.	Description	Amount	Storage
ON-040	High Yield T7 RNA Synthesis Kit	50 rxns	-20°C
ON-039	RNase inhibitor	40 KU	-20°C

## Product Details

### Unit Definition

One unit incorporates 1 nmol of AMP into RNA in a 20 µL reaction in 10 minutes at 37°C

### Concentration

5,000 U/mL

### Reaction Temperature

37°C

### Storage Buffer (pH 7.5 @ 25°C)

- 20 mM Tris-HCl
- 1 mM EDTA
- 300 mM NaCl
- 1 mM DTT
- 0.1% Triton X-100 (v/v)
- 50% glycerol (v/v)

### Reaction Buffer

#### 10X poly(A) polymerase reaction buffer (pH 7.9 @ 25°C)

- 500 mM Tris-HCl
- 2.5 M NaCl
- 100 mM MgCl<sub>2</sub>

# NTPs and Cap Analogs

## For RNA Synthesis

Since 1998, **Hongene Biotech Corporation** has been a leading manufacturer with state-of-the-art facilities dedicated to nucleosides, nucleotides, and phosphoramidites.

Our experts also provide custom synthesis for your R&D, supporting efficient product development and market entry. Through continuous innovation, advanced manufacturing technologies, rigorous quality control, and the dedicated support of our technical team, we help customers achieve their goals with efficiency and cost-effectiveness.

To customize cap analogs, please contact [info@hongene.com](mailto:info@hongene.com)

### NTPs

Cat. No.	Description	Amount	Storage
R1331	ATP, 100mM solution	1 mL	-20°C
R2331	GTP, 100mM solution	1 mL	-20°C
R3331	CTP, 100mM solution	1 mL	-20°C
R5331	UTP, 100mM solution	1 mL	-20°C
R5-027	1-N-Me-Pseudo UTP, 100mM Solution	100 µL	-20°C
R1-051	ATP, 200mM Tris Salt Solution	100 µL	-20°C
R2-057	GTP, 200mM Tris Salt Solution	100 µL	-20°C
R3-052	CTP, 100mM Tris Salt Solution	100 µL	-20°C
R5-065	UTP, 200mM Tris Salt Solution	100 µL	-20°C
R5-064	1-N-Me-Pseudo UTP, 200mM Tris Salt Solution	100 µL	-20°C
R3-029	5-Me-CTP, 100mM Solution	1 mL	-20°C
R5-104	5-Me-UTP, 100mM Solution	1 mL	-20°C
R5-022	Pseudo-UTP, 100mM Solution	1 mL	-20°C
R5-046	5-OMe-UTP, 100mM Solution	1 mL	-20°C
R5-066	5-OMe UTP, 200mM Tris Salt Solution	100 µL	-20°C

### Cap Analogs

Cat. No.	Description	Cap Type	Amount	Storage
ON-089	GpppG	Dinucleotide; Cap0	Inquiry	-20°C
ON-137	GpppA	Dinucleotide; Cap0	Inquiry	-20°C
ON-138	M7-GpppA	Dinucleotide; Cap0	Inquiry	-20°C
ON-136	M7-GpppG	Dinucleotide; Cap0	Inquiry	-20°C
ON-134	m7G(5')pppA(2'OMe)pG*	Trinucleotide; Cap1	Inquiry	-20°C

\*The use of this product may require the buyer to obtain additional third party intellectual property rights for certain applications.

## Cap Analogs

Cat. No.	Description	Cap Type	Amount	Storage
ON-219	m7G(5')pppA(2'OMe)pU*	Trinucleotide; Cap1	Inquiry	-20°C
ON-577	m7G(5')pppA(2'OMe)pA(2'OMe)pG	Tetranucleotide; Cap2	Inquiry	-20°C
ON-598	m7G(5')pppA(2'OEt)pG ( <b>HiXCap™ E1</b> )	Trinucleotide; Cap1	Inquiry	-20°C
ON-587	(3'OMe)m7G(5')pppA(2'OEt)pG ( <b>HiXCap™ E2</b> )	Trinucleotide; Cap1	Inquiry	-20°C
ON-797	(3'OMe)m7G(5')pppA(2'OEt)pApG ( <b>HiXCap™ E3</b> )	Tetranucleotide; Cap1	Inquiry	-20°C

\*The use of this product may require the buyer to obtain additional third party intellectual property rights for certain applications.

# Enzymes & Kits

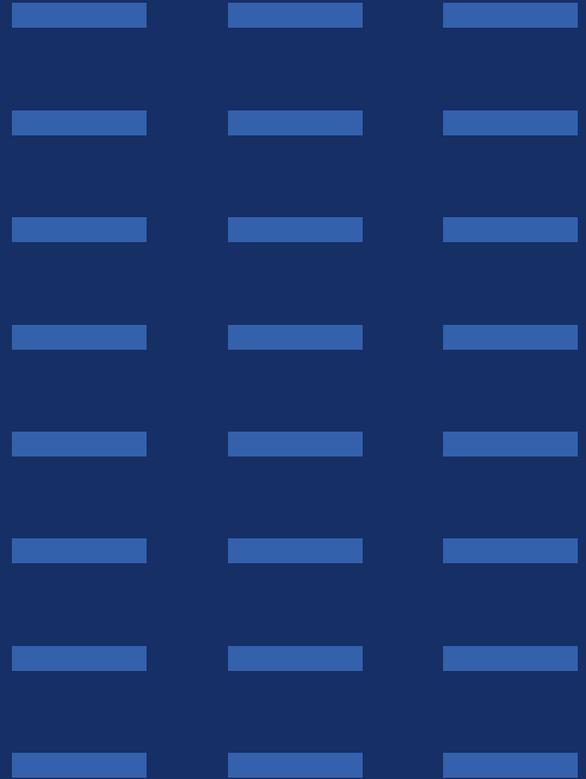
## Kits

Cat. No.	Description	Amount	Storage
ON-040	High yield T7 RNA synthesis kit	50 rxns	-20°C
ON-257	Capped RNA synthesis kit*	N/A	-20°C
ON-269	Capped RNA synthesis kit (with tailing)*	N/A	-20°C

\* For sale outside USA only.

## Enzymes

Cat. No.	Description	Amount	Storage
ON-124	BspQI (BSA-free)	10 KU	-70°C/-20°C
ON-211	T7 Enzyme mix	N/A	-20°C
ON-004	T7 RNA polymerase, low concentration	10 KU	-20°C
ON-005	T7 RNA polymerase, high concentration	N/A	-20°C
ON-039	RNase inhibitor	40 KU	-20°C
ON-025	Inorganic pyrophosphatase (yeast)	10 KU	-20°C
ON-109	DNase I (recombinant, RNase-free)	1000 KU	-20°C
ON-028	Vaccinia capping enzyme	10 KU	-20°C
ON-014	mRNA cap mRNA cap mRNA cap 2'-O-methyltransferase	50 KU	-20°C
ON-074	S-adenosylmethionine (SAM), 32mM	N/A	-20°C
ON-126	Poly(A) polymerase	5000 U	-20°C
ON-024	RNase III, E.coli	1000 U	-20°C
ON-080	10X EDTA	1 mL	-20°C
ON-081	T4 RNA ligase 1	N/A	-20°C
ON-179	Alkaline phosphatase, TAB5	1000 U	-20°C
ON-180	10X Phosphatase Reaction Buffer	0.8 mL	-20°C



# Bring Your RNA to Life

Let's Get Started Today. Contact us to Discuss Your Needs.



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