

IVT mRNA

IT1000

EzRNA™ T7 High Yield RNA Synthesis Kit

IT1100

EzRNA™ T7 High Yield RNA Synthesis Kit (Ψ -UTP)

IT1200

EzRNA™ T7 High Yield RNA Synthesis Kit ($me^1\Psi$ -UTP)

RC1000

EzRNA™ RNA Capping System

IT1000

EzRNA™ T7 High Yield RNA Synthesis Kit

For *in vitro* generating RNA from T7 promoter-driven DNA template

PRODUCT INFORMATION

Intended Use	The kit is a set of reagents and enzymes designed for <i>in vitro</i> synthesis of RNA molecules from T7 promoter-driven DNA template.
No. of Reactions	50 RXN / Kit (20 µl/ reaction)
Reaction Time	2 hr (standard)
Kit Storage	-20°C

Reagents Supplied

Component	Cap Label (color)	Volume	Storage
T7 RNA Polymerase Mix	T7 Enzyme mix (Red)	100 µl	-20°C
10 x T7 Reaction Buffer	10 xT7 Buf. (Green)	100 µl	-20°C
NTP Premix (25 mM each)	NTPs (Green)	400 µl	-20°C
Control DNA	control DNA (white)	10 µl	-20°C
Lithium Chloride (7.5M)	7.5M LiCl (white)	1 ml	-20°C
Nuclease-Free water	Nuclease-Free water (Green)	1 ml	-20°C

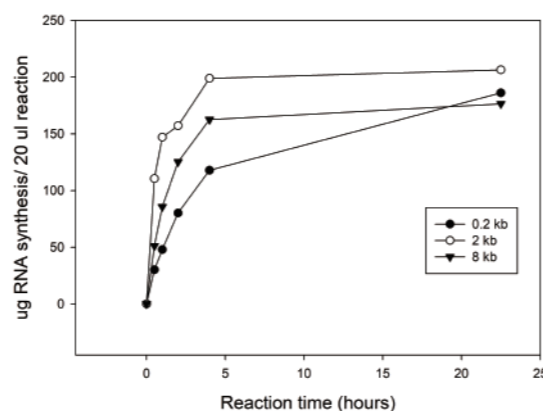
Features

- High yield
- NTP premixed
- Reduced immunogenicity -Pseudouridine (Ψ) and N1-methyl pseudouridine (me¹Ψ) available
- Compatible with CleanCap® Reagent AG

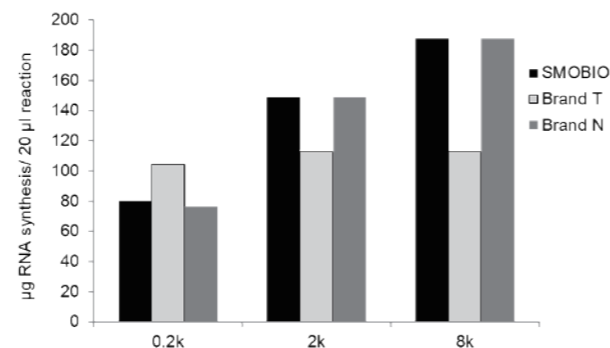
Ordering Information

Catalog No.	Product Name	Package
IT1000	EzRNA™ T7 High Yield RNA Synthesis Kit	50RXN
IT1100	EzRNA™ T7 High Yield RNA Synthesis Kit (Ψ-UTP)	50RXN
IT1200	EzRNA™ T7 High Yield RNA Synthesis Kit (me ¹ Ψ-UTP)	50RXN

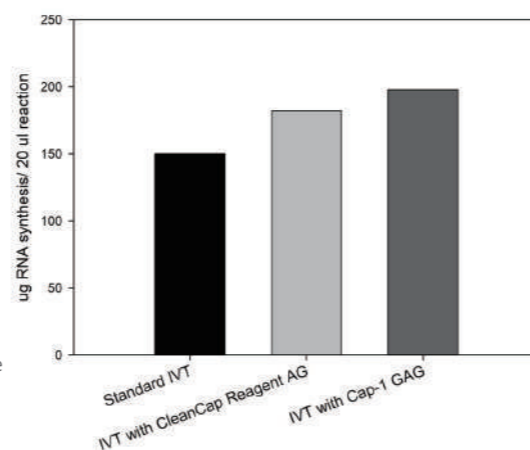
Suitable for both short and long RNA transcripts



High yield



Compatible with CleanCap® Reagent AG



RC1000

EzRNA™ RNA Capping System

A complete enzymatic capping system based on the Vaccinia Capping Enzyme

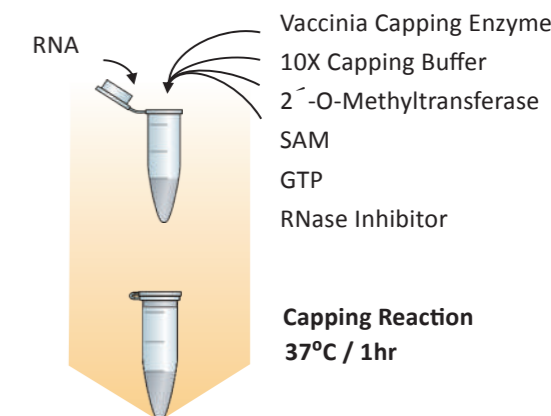
PRODUCT INFORMATION

Intended Use	It is specifically designed to add a 5' capping modification into RNA that is initially uncapped and produced through the <i>in vitro</i> transcription (IVT) reaction.
No. of Reactions	50 RXN / Kit (20 µl/ reaction)
Reaction Time	1 hr (standard)
Kit Storage	-20°C

Reagents Supplied

Component	Cap Label (color)	Volume	Storage
Vaccinia Capping Enzyme	Capping Enzyme (Red)	50 µl	-20°C
2'-O-Methyltransferase	Cap Mtase (Red)	50 µl	-20°C
10x Capping Buffer	Capping Buf. (Green)	100 µl	-20°C
S-adenosylmethionine (SAM) (32 mM)	32 mM SAM (Green)	50 µl	-20°C
RNase Inhibitor (20 U/µl)	RNase Inhibitor (Red)	50 µl	-20°C
GTP (10 mM)	GTP 10 mM (Green)	50 µl	-20°C
Nuclease-Free water	Nuclease-Free water (Green)	1 ml	-20°C

One-step reaction to produce cap-1 RNA Mixture setup



Features

- 2'-O-Methyltransferase included for Cap-1 RNA synthesis
- High stability
- High capping efficiency
- RNase inhibitor included

Ordering Information

Catalog No.	Product Name	Package
RC1000	EzRNA™ RNA Capping System	50RXN

Transient expression of eGFP-mRNA in mammalian cells

The eGFP-mRNA was generated utilizing the SMOBIO EzRNA™ T7 High Yield RNA Synthesis Kit (Ψ-UTP) in conjunction with the EzRNA™ RNA Capping System. Subsequently, eGFP-mRNA was transfected into HeLa cells using Lipofectamine 3000 for an incubation period of 18 hours. Higher than 90% transfection efficiency was observed.

