

Generate high yield canonical IVT RNA in two hours with a T7 promoter

T7-Scribe™ Standard RNA IVT Kit

Product Intro

The T7-Scribe™ Standard RNA IVT Kit is specially designed for high-yield synthesis of canonical (GAUC) RNA from *in vitro* transcription reactions. A reaction produces up to 150 µg of RNA from 1 µg of DNA template in two hours. The reactions can be easily scaled up to produce milligram amounts of RNA, and high yields are achieved with either long or short transcripts.

Benefits

- **High yield:** Specially formulated for high yields of canonical (GAUC) *in vitro* transcribed RNA.
- **Streamlined workflow:** Produce up to 150 µg of RNA from 1 µg of template in two hours.
- **Scalable:** Easily scale up reactions to produce milligram amounts of RNA.

Product Description

The [T7-Scribe™ Standard RNA IVT Kit](#) is specially formulated to produce high yields of canonical (GAUC) RNA from an *in vitro* transcription (IVT) reaction. The standard two hour, 20 µl reaction will yield up to 150 µg of RNA from 1 µg of the control template. These yields are made possible by the high-performance properties of the T7-Scribe™ enzyme. The T7-Scribe™ Standard RNA IVT Kit produces high yields of either long or short transcripts. The standard reaction can be scaled up to produce milligram amounts of RNA. In addition, a T7-Scribe™ reaction can be readily modified to prepare fluorescent-, biotinylated- or digoxigenin-labeled RNA.

T7-Scribe™ IVT RNA can be further processed into mRNA (5'-capped and 3'-poly(A) tailed) using [ScriptCap™ Cap 1 Capping System](#) (contains both [ScriptCap™ Capping Enzyme](#) and [2'-O-Methyltransferase](#)) and [A-Plus™ Poly\(A\) Polymerase Tailing Kit](#), available separately.

Performance Data

The standard two hour, 20 µl reaction will yield up to 150 µg of RNA from 1 µg of the control template. Lower amounts of DNA template can be used successfully in a T7-Scribe™ reaction. Table 1 summarizes the yields obtained when reducing the amount of control template DNA in a T7-Scribe™ reaction. Results may vary depending on the template used. Increasing the reaction time to four to six hours may increase the yield of RNA.

Table 1. RNA yields from T7-Scribe™ Standard RNA IVT Kit reactions using different DNA inputs. The standard protocol uses 1 µg of DNA input.

Control Template Amount	RNA Yield
1000 ng (1 µg)	130-160 µg
500 ng (0.5 µg)	110-130 µg
100 ng (0.1 µg)	30-50 µg
50 ng (0.05 µg)	15-25 µg
10 ng (0.01 µg)	10-20 µg
1 ng (0.001 µg)	3-8 µg

Ordering information

Catalog Number	Description
C-AS3107	T7-Scribe™ Standard RNA IVT Kit (50 reactions)

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