

SOLIScript® RT cDNA synthesis MIX

Superior specificity with gene-specific primers in convenient mix format

Novel *in silico*-engineered, thermostable reverse transcriptase with reduced RNase H activity. SOLIScript® RT is extremely stable and will remain fully active for up to one month at room temperature.



superior specificity with gene-specific primers
 wide reaction temperature 37°C - 60°C
 reaction set-up and shipment without dry ice
 in convenient 3-tube kit format

Ordering

Choose Product Size

100 rxn | 20 µl/rxn

500 rxn | 20 µl rxn

20 rxn | 20 µl/rxn **free**

sample

REQUEST FOR BULK SIZE

Some applications of this product may require a license which is not provided by the purchase of this product.

For research use only.

— Reagents Provided

Item	Pcs.	Vial size
SOLIScript® Enzyme Mix	1	100 rxn 150 µl
10x RT Reaction Premix without primers	1	250 µl
Water, nuclease free	2	1.25 ml

Description

SOLIScript® Reverse Transcriptase (RT) is an *in-silico* designed chimeric RNA-directed DNA polymerase.

SOLIScript® RT can synthesize a complementary DNA strand from ssRNA or ssDNA and is active at higher temperatures (up to 60°C).

SOLIScript® RT is a robust enzyme for RNA detection and has enhanced stability at room temperature with no activity loss for up to 1 month. This RT contains a RNase H domain with reduced activity.

Applications

First strand cDNA synthesis

RT-PCR

RT-qPCR

Properties

Sample type: RNA

Final product: cDNA (first strand)

Product format: Enzyme mix with all reagents included

Enzyme: SOLIScript® Reverse Transcriptase

Source: Purified from an *E. coli* strain that carries an overproducing plasmid containing a SOLIScript® Reverse Transcriptase gene.

Storage and dilution buffer: 50% glycerol (v/v), 20 mM Tris-HCl pH 7.5 at 25°C, 100 mM KCl, 0.1 mM EDTA and stabilizers.

Reagents

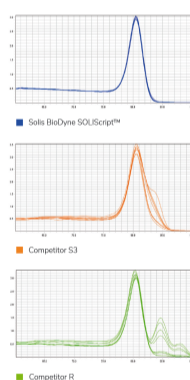
SOLIScript® Enzyme Mix with SOLIScript® RT and RiboGrip RNase Inhibitor

10x RT Reaction Premix without primers, RT reaction buffer with DTT and dNTPs

Water, nuclease free

cDNA synthesis primer comparison

	5' cap primer	Random primer	3' poly(A) and random primers	Gene-specific primer
Recommended final conc.	5 µM	5 µM	2.5 µM each	0.1 – 1 µM
Primer extension at 42°C for 5–10 min	+	+	+	–
Benefits	Full length cDNA	All RNA in sample is synthesized to cDNA	Reducing 3' bias	All reaction reagents used for gene of interest (increases sensitivity)
Disadvantages	Potential 3' bias; Can't bind to RNA lacking poly(A) sequence; Can bind to long poly(A) sequences in the middle of RNA	Truncated cDNA (multiple potential binding sites per RNA molecule)	Clage of doesn't bind to RNA lacking poly(A) sequence; Truncated cDNA (multiple potential binding sites per RNA molecule)	Only 1 specific gene of interest per cDNA; Surrogate run can be analyzed downstream
Target RNA	RNA containing poly(A) tail (long mature eukaryotic mRNA, which accounts for 15% of total RNA in the cell)	Poly(A) tail RNA; 28S/18S rRNA; Degraded RNA	Combined targets of both primers	Specific gene of interest



Reference:

“ SOLIScript is definitely the best RT enzyme in its price category. It is a consistent and processive enzyme. In our experiments, we work with heavily modified RNA species, and yet SOLIScript showed excellent results. ”

KIRILL JEFIMOV
University of Bergen, Norway

cDNA synthesis priming options

Superior specificity

India Contact:

Life Technologies (India) Pvt. Ltd.

306, Aggarwal City Mall, Opposite M2K Pitampura,

Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222

Mobile: +91-9810521400

Fax: +91-11-42208444

Email: customerservice@lifetechindia.com

Web: www.lifetechindia.com