

Gojira Fine Chemicals, LLC

HighScript Reverse Transcriptase

Cat. No: HS1014

Product Information Leaflet

Description

HighScript Reverse Transcriptase together with enhanced buffer chemistry enables fast synthesis of a cDNA that accurately represents the transcript. The enzyme together with its buffer allows efficient and unbiased synthesis of the cDNA molecule.

HighScript Reverse Transcriptase is a modified version of MMLV reverse transcriptase with noticeable thermostability and high enzymatic activity. This enzyme is offered as a blend with an RNase inhibitor to prevent RNA degradation. Total RNA is the preferred substrate of this enzyme because it is not inhibited by other forms of RNA (rRNA and/or tRNA).

Kit components

Component	*HS1014-10 10,000 Units	*HS1014-40 40,000 Units
HighScript Reverse Transcriptase (200 U/ μ L) (with RNase inhibitor)	1 X 200 μ L	4 X 200 μ L
∞5x HighScript buffer	2 X 25 μ L	2 X 100 μ L

*Other pack sizes or bulk orders are available upon request.

∞The 5x HighScript buffer contains 15 mM MgCl₂, 5 mM dNTPs, enhancers, and stabilizers. It was designed for robust performance; no further additions are necessary.

∞∞The suggested primer concentration is 1 pM for specific primers, 1 μ M for Oligo-dT₁₈, and 2–5 μ M for random hexamers.

Storage and shipment

Transport with an ice pack or on dry ice (for shipments taking more than 2 days). The reagents should be stored between -30°C and -15°C upon arrival. The reagents are stable for 12 months if stored correctly. The reagents are stable for 1 month at 4°C.

Reaction set-up

The recommended mastermix set-up for a 20 μ L reaction volume is shown in the table below.

∞Reagent	Volume (μ L)	Final concentration
5x HighScript buffer	4	1x
HighScript Reverse Transcriptase (200 U/ μ L)	1	
4 pg to 0.4 μ g of total RNA or oligodT-purified mRNA	X	1x
10x Primer Mix	2	
Nuclease-free water	Up to 20 μ L final volume	
Total volume	20 μ L	

∞We suggest incubating the primer mix with the RNA template for 5 minutes at 70°C before starting the reaction by adding the reaction mix.

For the majority of applications (<65% GC), incubation at 42°C for 30 minutes is sufficient. For templates with a more complex secondary structure, incubation at 65°C is also possible.

Technical information and support

For technical inquiries or assay development support, please contact us via e-mail at: docsupport@gojirafc.com.

Additional information and technical resources are available on our website: WWW.gojirafc.com