

MedixMDx HighScript Reverse Transcriptase

Description

MedixMDx 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.

MedixMDx 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	*MX1104-10 10,000 Units	*MX1104-40 40,000 Units
MedixMDx HighScript Reverse Transcriptase (200 U/μL) (with RNase inhibitor)	2 X 0.025 mL	2 X 0.1 mL
∞5x HighScript buffer	0.2 mL	4 X 0.2 mL

*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.

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.

Reaction set-up

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

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

∞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.

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

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 55°C is also possible.

Technical information and support

For technical enquiries or assay development support, please contact us via e-mail at: mdx@medixbiochemica.com. Additional information and technical resources are available on our website at: www.medixbiochemica.com/en/MedixMDx.

