

iScript™ cDNA Synthesis Kit

25 x 20 µl reactions 170-8890

100 x 20 µl reactions 170-8891

For Research purposes only

Store at -20 °C (not frost-free)

iScript cDNA Synthesis kit provides a sensitive and easy-to-use solution for two-step RT-PCR. This kit includes just three tubes - comprehensive of the reagents required for successful RT-PCR.

The iScript reverse transcriptase is RNase H⁺, resulting in greater sensitivity than RNase H⁻ enzymes. iScript is a modified MMLV-derived reverse transcriptase, optimized for reliable cDNA synthesis over a wide dynamic range of input RNA. The enzyme is provided pre-blended with RNase inhibitor. The unique blend of oligo (dT) and random hexamer primers in the iScript Reaction Mix works exceptionally well with a wide variety of targets. This blend is optimized for the production of targets < 1kb in length.

iScript cDNA Synthesis Kit produces excellent results in both real-time and conventional RT-PCR.

Storage and Stability

Store the iScript™ cDNA Synthesis Kit at -20 °C in a constant temperature freezer. When stored under these conditions the kit components are stable for a minimum of one year after ship date. Nuclease-free water can be stored at room temperature.

Kit Contents

Reagent	Volume
25 reaction kit	
5x iScript Reaction Mix	100µl
Nuclease-free water	1.5ml
iScript Reverse Transcriptase	25µl
100 reaction kit	
5x iScript Reaction Mix	400µl
Nuclease-free water	1.5ml
iScript Reverse Transcriptase	100µl

Reaction Set Up

Component	Volume per reaction
5x iScript Reaction Mix	4 μ l
iScript Reverse Transcriptase	1 μ l
Nuclease-free water	x μ l
RNA template (100fg to 1 μ g Total RNA)*	x μ l

Total Volume	20 μ l
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Reaction Protocol

Incubate complete reaction mix:

5 minutes at 25°C

30 minutes at 42°C

5 minutes at 85°C

Hold at 4°C (optional)

Reagents and Materials Not Supplied

Reagents for PCR or real-time PCR

Such as:

iTaq™ DNA polymerase, 170-8870

iQ™ Supermix, 170-8860 or

iQ™ SYBR® Green Supermix, 170-8880

Pipette tips, aerosol barrier tips

Such as:

the Xcluda® Style B, 211-2006

Nuclease-free tubes

Such as:

0.2ml Thin-Wall Tubes, 223-9473 or

plates, 223-9441

RNA purification kit

Such as the:

Aurum™ Total RNA Mini Kit, 732-6820 or

Aurum Total RNA Kit, 2 x 96 well, 732-6800

Recommendations for optimal results using the iScript cDNA Synthesis Kit:

The maximum amount of the cDNA reaction that is recommended for downstream PCR is one-tenth of the reaction volume, typically 2 μ l.

*When using larger amounts of input RNA (>1 μ g) the reaction should be scaled up e.g. 40 μ l reaction for 2 μ g, 100 μ l reaction for 5 μ g to ensure optimum synthesis efficiency.

Practice of the patented polymerase chain reaction (PCR) process requires a license. The iCycler iQ system includes a licensed thermal cycler and may be used with PCR licenses available from PE Corporation. Its use with authorized reagents also provides a limited PCR license in accordance with the label rights accompanying such reagents. Some applications may require licenses from other parties.