

# Check the product label for actual catalog number, lot and expiry date.

# qScriber™ cDNA Synthesis Kit

CAT.#	SIZE	COMPONENTS	COMPONENT COMPOSITION
RTK0101	25 r of 20 μl	25 μl - qScriber™ Enzyme Blend, 20X 100 μl - 5X qScriber™ Reaction Mix 1 ml – PCR Water	Enzyme Blend Storage buffer contains Tris, 50% glycerol and other components.
RTK0104	100 r of 20 μl	4 x 25 μl - qScriber™ Enzyme Blend, 20X 4 x 100 μl - 5X qScriber™ Reaction Mix 2 x 1 ml – PCR Water	5X qScriber™ Reaction Mix contains dNTPs, MgCl₂, anchored oligo(dT), random hexamers and other components.
Storage	In the dark d	rt -20°C.	

#### APPLICATIONS

- cDNA template generation for qPCR or PCR
- Unbiased, efficient cDNA synthesis
- Detection of low target amounts
- cDNA synthesis from complex templates

#### BENEFITS

- Thermostable HighScriber™Reverse Transcriptase blended with Ribonuclease Inhibitor for efficient cDNA synthesis
- Optimized reaction mix with oligo (dT) and random primers for unbiased representation of mRNA ends
- cDNA synthesis from complex templates at up to 55°C
- High sensitivity detection from 1 pg of total RNA template

# PRODUCT DETAILS

The qScriber™ cDNA Synthesis Kit is a highly efficient and simpleto-use system for cDNA synthesis eliminating the need for tedious reaction optimization. The qScriber™ Enzyme Blend ensures high sensitivity detection from low copy number targets. The highly active and thermostable HighScriber™ Reverse Transcriptase blended with RNase Inhibitor allows for an efficient cDNA synthesis and reaction safety. The wide reaction temperature range (38°C - 55°C) ensures efficient transcription from GC rich templates.

The 5X qScriber<sup>™</sup> Reaction Mix includes optimal concentrations of magnesium and dNTPs and a combination of anchored oligo (dT) and random hexamers for unbiased representation of mRNA ends.

The kit is an optimal choice for generating high quality cDNA from viral RNA, miRNA or other targets for qPCR or for PCR.

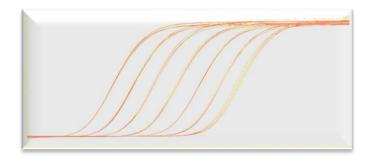
### PROTOCOL

- RNA is sensitive to degradation by RNases present everywhere. Take care to protect RNA from degradation keep your bench clean, wear gloves, use sterile tubes and filter pipet tips.
- Include positive and negative controls in parallel.
- Thaw and keep reagents on ice. Mix well before use.
- Do not add any other components into the reaction with exception of the template and the supplied reagents.
- The recommended reaction temperature is 42-50°C. For GC rich templates, the temperature can be increased up to 55°C.

IN VITRO RESEARCH USE ONLY

# PERFORMANCE

qScriber™ cDNA Synthesis Kit provides excellent results within the very broad range of the total RNA amount used



4 pg, 40 pg, 400 pg, 4 ng, 40 ng, 400 ng and 4 µg of mouse total RNA were used for cDNA synthesis under the standard qScriber™ cDNA Synthesis Kit protocol conditions. An aliquot from each reaction was taken for subsequent qPCR with ORA™ qPCR Green Mix to amplify a 70 bp fragment of the mouse RN18S gene. All reactions independently from the initial amount of RNA were 100% efficient.

✓ Prepare a 20 µl reaction:

5X qScriber™ Reaction Mix	4 µl
qScriber™ Enzyme Blend, 20X	1 µl
Total RNA	1 pg to 5 µg
PCR Water	Up to 20 µl

- Mix gently, avoid bubbles.
- Incubate 30 min at 42-50°C to synthesize cDNA.
- ✓ Inactivate the enzyme at 85°C for 10 min.
- $\checkmark$  Store reactions at -20°C or on ice for an immediate use.
- V Use 2-4  $\mu$ l of this reaction mix per 20  $\mu$ l qPCR reaction.

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