

A.B.T.TM cDNA Synthesis Kit (dT20)

Cat#	Size
• C01-01-05	50 Rxn
• C01-01-20	200 Rxn
• C01-01-25	250 Rxn

Description: A.B.T.TM cDNA Synthesis Kit (dT20) is a complete system for the efficient synthesis of first strand cDNA from RNA templates. The recombinant Ribonuclease Inhibitor, supplied with the kit effectively protects RNA template from degradation. The oligo dT anneals selectively on the poly(A) tail of mRNA. Gene-specific primers may also be used with the kit. The first strand of cDNA can be directly used as a template in PCR.

Kit Components:

Component	C01-01-05	C01-01-020	C01-01-25
Reverse Transcriptase (200 U/μl)	50 μl	200 μl	250 μl
10X Reaction Buffer	100 μl	400 μl	500 μl
RNase Inhibitor (40U/μl)	25 μl	100 μl	125 μl
dNTP mix (2.5mM)	100 μl	400 μl	500 μl
Oligo dT20 primer (50μM)	50 μl	200 μl	250 μl
DTT (100 mM)	50 μl	200 μl	250 μl
RNase free water	2 ml	2 ml	2 ml

Recommended Protocol: This protocol is exemplary for one reaction, and for multiple reactions it is necessary to calculate the components in a proportional manner. Mix the kit components in a micro tube in the recommended proportions below. Briefly centrifuge the tube to spin down the contents and to eliminate any air bubbles. Place the tube on ice until to reverse transcriptase reaction.

For 10 μl Step-1 Reaction	Volume
Oligo dT20 primer (50μM)	1 μl
dNTP mix (2.5mM)	1 μl
RNA Template	< 5 μg
RNase free Water	Up to 10 μl

Keep for 5min. at 65°C & cool immediately on ice.

Prepare the reaction mixture by followings:

For 20 μl Step-2 Reaction	Volume
Template RNA & primer mix	10 μl
10X reaction buffer	2 μl
RNase Inhibitor (40U/μl)	0.5 μl
Reverse Transcriptase (200 U/μl)	1 μl
DTT (100mM)	1 μl
RNase free water	Up to 20 μl

Mix gently and carry-out reverse transcriptase reaction conditions:

RT Steps	Temp (°C)	Time	Cycle
Step 1	42	30-60 min.	1
Step 2	70	10 min.	1
Step 3	4	∞	1

Notice: The synthesized cDNA can be used immediately, without purification, for end-point or real-time PCR or stored at -20°C for future use.

Storage Conditions: Store all contents at -20°C in a freezer.

Quality Control: Nicking activity, priming activity, exonuclease activity, or endonuclease activity has not been detected.