

## AviCidiNA™

Cat. No.: A10810 Cat. No.:

## Store at -20 °C

50 tests

100 tests

Component	A10810	A10811
Buffer mix (2x)	500 µl	1 ml
Enzyme mix	100 µl	200 µl
DEPC-treated water	500 μl	1 ml
cDNA Control Primer Mix (B2M)	50 µl	100 µl

#### Description:

AviCidiNA<sup>™</sup> contains all necessary components for conversion of total RNA or mRNA to **the single** stranded cDNA.

## Buffer mix (2X) contains:

- RT buffer
- 1mM dNTP mixture
- 8mM MgCl<sub>2</sub>
- Oligo d(t)16
- Random hexamer
- Stabilizer

## Enzyme mix contains:

- Thermostable H-minus MMLV
- RNase Inhibitor
- Stabilizer

#### Features:

- Easy protocol & minimum pipetting steps.
- RNase minus MMLV enzyme.
- Long mRNA synthesis.
- High temperature reaction to destabilize RNA secondary structures.

# General Reaction Protocol (first strand cDNA synthesis):

- Mix the template RNA (total RNA or Poly (A) mRNA) and other kit components in RNase-free tube as below table.
- **2.** Mix the above mixture by quick vortex.

Component	Vol. (µl)
Taq 2X Premix	10
cDNA Control primer mix	1
cDNA	1-5
PCR Grade Water	Up to 20 µl

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**3.** Incubate 10 min at 25  $^{\circ}$ C.

**4.** Incubate 60 min at 47 °C.

 Stop the reaction by heating at 85 °C for 5 minutes. Chill on the ice or at 4 °C.

**Note:** To perform PCR, you can add the finished RT reaction up to 1:5 of the final PCR volume.

#### cDNA Control PCR Reaction:

- **1.** Prepare a reaction mix according to the table.
- For negative tube use PCR grade water. The final vol. in each PCR reaction tubes is 20 μl.

Component	Vol. (µl)
Taq 2X Premix	10
cDNA Control primer mix	1
cDNA	1-5
PCR Grade Water	Up to 20 μl

**Note:** It is recommended that all of the PCR components be premixed in a sufficient quantity for daily needs and then dispensed into the individual reaction tubes.

## Amplification protocol:

Cycle	Time	Temp <sup>°</sup> C
1	4 min	95
	30 sec	94
35	30 sec	57
	30 sec	72
1	5 min	72

#### Agarose gel Electrophoresis:

Run the total 5-7  $\mu$ L of PCR products alongside 3  $\mu$ L DNA marker on a 2% agarose gel containing **AviStain**<sup>TM</sup>.

The B2M primers amplify a band of approximately 230 bp from **human, mouse and rat** B2M cDNA.

#### Disclaimers:

**AviCidiNA<sup>™</sup>** is for **Research Use Only** and should only be used by trained professionals.

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