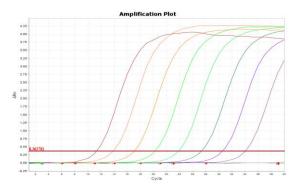


## BlitzAmp cDNA Synthesis Kit

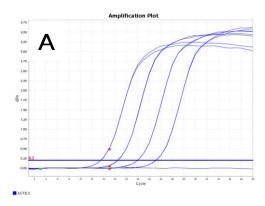
Provides access to the full spectrum of the transcriptome. Combining an optimized blend of both random primers and anchored oligo dT primers to target both polyadenylated and non-polyadenylated transcripts.

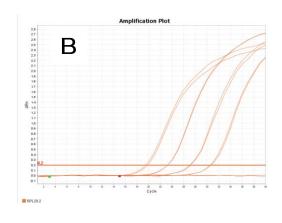


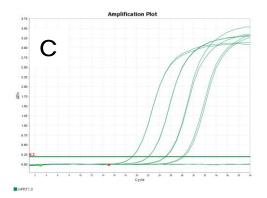
## 8 logs of dynamic range

18S rRNA was amplified from cDNA synthesized from 25 fg to 250 ng of total RNA using BlitzAmp cDNA Synthesis Kit and BlitzAmp qPCR Master Mix.

R<sup>2</sup>: 0.999, Efficiency: 97%







## Optimized reagents and protocol for RT-qPCR

BlitzAmp cDNA Synthesisi kit was used to generate cDNA from 1 ng to 1  $\mu$ g of total RNA. Multiple targets were amplified using BlitzAmp qPCR Master Mix .

A. ACTB (E: 103%) B. RPL29 (E: 90%) C. HPRT1 (E: 109%)

## **Reverse Transcription Protocol**

Important: Keep all reagents on ice (or at 4°C) at all times during set up.

- **Step I:** Gently thaw **template RNA** on ice, use up to I µg per RT reaction.
- Thaw **RT Buffer (4x).** Mix by vortexing and spin down by centrifugation. If necessary, incubate **RT Buffer (4x)** at 37°C and vortex to dissolve any precipitate.
- Step 3: Assemble RT reaction according to Table 1. Reverse Transcriptase should be kept at -20°C and added to the master mix last.

Table 1 – Reverse	e transcription	reaction setup	(per reaction)
			4 ,

Reagent	Volume
Template RNA (up to 1 ug)	XμI
(Optional) ID3EAL RT Spike-In	1 μΙ
RT Buffer(4x)	5 μl
Reverse Transcriptase (20x)	lμl
Nuclease free water	To 20 μl
Total volume	الب 20

- **Step 4:** Mix assembled reagents thoroughly and spin briefly.
- Step 5: Incubate reaction at 42°C for 30 min followed by heat-inactivation at 95°C for 5 min

**PAUSE POINT:** Undiluted cDNA can be stored at -20°C for up to 4 weeks. Avoid repeated freeze-thaw cycles.

We recommend following up with BlitzAmp qPCR Master Mix for best results.