



**Cod UNG in  
RT-LAMP**

Carry-over  
contamination control

[www.arcticzymes.com](http://www.arcticzymes.com)

## Removal of carry-over contamination in RT-LAMP

ArcticZymes Cod UNG is ideal for contamination control in RT-LAMP. One unit of Cod UNG per 30  $\mu$ l reaction is sufficient for removing even high concentrations of carry-over contamination.

- ✓ Ensure that dNTP mixes containing dUTP were used in previous RT-LAMP experiments.
- ✓ Check that the RT-LAMP reaction is compatible with dUTP by running side-by-side reactions containing different ratios of dUTP to dUTP (100% dUTP, 90% dUTP, 80% dUTP and 0% dUTP).
- ✓ Add 1 U Cod UNG per 30  $\mu$ l reaction in the RT-LAMP reaction mix, see suggested RT-LAMP reaction below. Prepare reaction mix on ice.
- ✓ Analyze your RNA at 65°C, no preincubation is necessary.

### Additional information

ArcticZymes Cod UNG is compatible with post-amplification analysis as it is completely and irreversibly inactivated at 55°C.

## Suggested RT-LAMP reaction

Component	1 rxn ( $\mu$ l)	Final Concentration
IsoPol™ BST+ 10X Buffer	3	1X
dNTP mix (10 mM, dTTP replaced with dUTP)	4.2	1.4 mM each
MgSO <sub>4</sub> (100 mM)	1.2	4 mM (8 mM total) *
EvaGreen® Fluorescent DNA Stain, 100 $\mu$ M	0.39	1.3 $\mu$ M
IsoPol™ BST+, 8 U/ $\mu$ l	1.2	0.32 U/ $\mu$ l
FIP + BIP 15 $\mu$ M/each F3 + B3 3.75 $\mu$ M/each LF + LB 7.5 $\mu$ M/each	1.6	0.8 - 1.6 $\mu$ M 0.2 $\mu$ M 0.4 $\mu$ M
AMV-RT (21 U/ $\mu$ l)	0.09	0.063 U/ $\mu$ l
ArcticZymes Cod UNG (5 U/ $\mu$ l)	0.2	1U (0.033 U/ $\mu$ l)
PCR grade water	13.12	N/A
RNA template	5	N/A
<b>Final volume</b>	<b>30</b>	

\*4mM contribution from the IsoPol™ BST+ 10X Buffer

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