



OmniAmp® RNA & DNA LAMP Kit

One Step RNA or DNA LAMP detection, only from Lucigen

- Amplify from any nucleic acid template: RNA, DNA and cDNA
- Get faster results than with Bst Exo Minus
- Run LAMP or RT-LAMP up to 72°C, get gene-specific results
- Complete kit with controls, Magnesium Sulfate and Betaine for easy optimization

The OmniAmp® polymerase is the only enzyme capable of Loop-mediated Isothermal Amplification (LAMP) from both RNA and DNA samples. The enzyme has a temperature optimum of 72°C, allowing increased specificity and flexibility as compared with Bst

Exo Minus or two-step processes.

The native reverse transcriptase activity of this enzyme means no longer adding a separate reverse transcriptase for RNA targets.

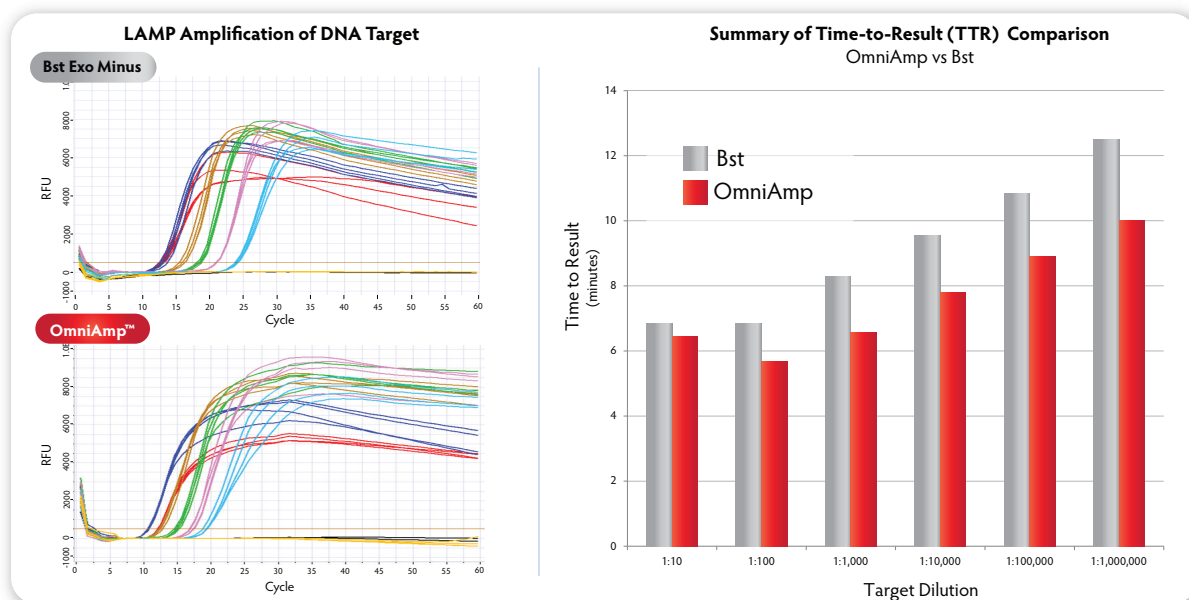


Fig. 1. Quantitation of LAMP Amplification from DNA Target

Quantitative results of LAMP amplification of *E. ictaluri* DNA over several orders of magnitude of target concentration. Color key: 1:10 = Red, 1:100 = Blue, 1:1,000 = Brown, 1:10,000 = Green, 1:100,000 = Pink, 1:1,000,000 = Light Blue. 1:10,000,000 dilution (yellow) and NTC's (Black) showed no amplification. The cycler was programmed to read amplification in 30-second intervals (cycles).

RT-LAMP: Reliable single-enzyme LAMP amplification directly from RNA

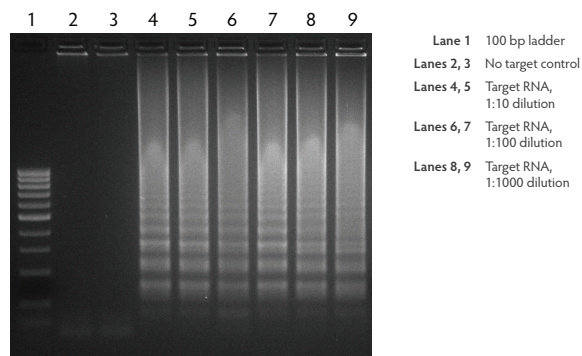


Fig 2. RNA LAMP reaction Agarose gel image of the included RNA LAMP Control Reaction. The common "ladder" banding pattern within a HMW smear is customary of LAMP reactions. No dedicated RT step or use of additional RT enzyme was used.

Products	Size	Cat. No.	Price
OmniAmp®	100 rxns	30065-1	\$204
RNA & DNA LAMP Kit	500 rxns	30065-2	\$816

ORDER INFORMATION

OmniAmp® RNA & DNA LAMP Kit is provided as a 50X enzyme with 10X DNA Polymerase Buffer C, 100 mM MgSO₄, 5M Betaine, Nuclease-free water, a control RNA template and control LAMP reaction primers. Standard reaction is 25 µL.

The enzyme is provided in a storage buffer of 10 mM Tris-HCl, pH 7.5, 50 mM KCl, 1 mM DTT, 0.1 mM EDTA, 0.1% Triton X-100, and 50% Glycerol. 10X DNA Polymerase Buffer C is composed of 200 mM Tris-HCl pH 8.8, 100 mM (NH₄)₂SO₄, 100 mM KCl, 20 mM MgSO₄, and 1% Triton X-100.

Licensing information: Lucigen is a fully licensed provider of LAMP reagents for research use. Patents WO 00/28082, WO 01/34790, and WO 01/77317 regarding the LAMP method are owned by the Eiken Chemical Co. Ltd. OmniAmp® and Bst Polymerase, Exonuclease minus are sold by Lucigen under license for use in LAMP for research use only. The products may not be used for LAMP-based human or diagnostic purposes without obtaining a license from Eiken. US Patent 8093030 for OmniAmp DNA Polymerase is owned by Lucigen Corp.