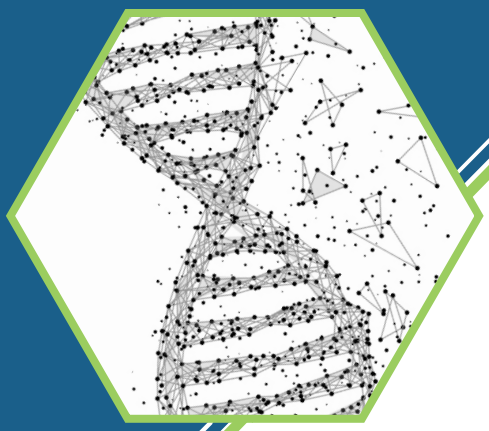

Varizymes
OPTIONS AMPLIFIED

Thunder™ Reverse Transcriptase

An RNA-dependent DNA polymerase

Thunder reverse transcriptase is an RNA-dependent DNA polymerase that can be used for complementary DNA (cDNA) synthesis from an RNA or DNA template and is ideal for use in RT-loop-mediated isothermal amplification (RT-LAMP). Thunder RT is a robust enzyme that works in a broad range of temperatures (40-72 °C) and has RNase H activity.

Application Notes

Thunder RT is a robust enzyme used for first-strand synthesis of complementary DNA (cDNA) from RNA or single-stranded DNA templates. It is ideally suited for RT-loop-mediated isothermal amplification (LAMP) assays.

Properties

- Optimal temperature: 55 °C
- Heat inactivation: 75 °C for 20 minutes
- Standard buffer: 50% glycerol, 50 mM Tris-HCl, 50 mM KCl, 1 mM DTT, 1 mM EDTA, pH 7.5
- Glycerol-free buffer: 10 mM Tris-HCl, 100 mM KCl, 0.1 mM EDTA, 1 mM DTT, pH 7.5
- Alternate buffers available as custom orders
- 10X Isothermal buffer included. **Please note** that use of the supplied Varizymes buffer will yield optimal results.
- Storage temperature: -20 °C (standard buffer), 4 °C (glycerol-free buffer)

Shipping and Storage

Thunder RT is stored at -20 °C in 50% glycerol (50 mM Tris-HCl, 50 mM KCl, 1 mM DTT, 1 mM EDTA, pH 7.5) or at 4 °C in a glycerol-free buffer (10 mM Tris-HCl, 100 mM KCl, 0.1 mM EDTA, 1 mM DTT, pH 7.5). Thunder RT is shipped on dry or blue ice. Repeated freeze/thaw cycles should be avoided.

Varizymes also offers a variety of encapsulated RNA controls for common targets, and we would love to work with you to develop a unique control to suit your needs. For more information visit www.varizymes.com or email info@varizymes.com.

**These products are intended for research use only, not for diagnostic use. The safety and efficacy of these products in diagnostic or other clinical uses has not been established.*