

ClearPeak Oligo(dT)18

Troubleshooting Guide

50 rxn, 100 rxn

Cat No: Q1850, Q18100

Use this guide for common first-strand cDNA priming problems with ClearPeak Oligo(dT)18. The primer contains 18 deoxythymidylic acid residues, hybridizes to the poly(A) tail of most eukaryotic mRNA, and is recommended for use with the EcoScript 5x First Strand cDNA Synthesis Kit.

Before You Start - Quick Checks

1. Store at -20°C and avoid freeze-thaw cycles.
2. Use 1 uL Oligo(dT)18 per 20 uL cDNA synthesis reaction as recommended.
3. Use the primer for poly(A)-tailed eukaryotic mRNA targets.
4. The primer is supplied in distilled water and is recommended with EcoScript 5x First Strand cDNA Synthesis Kit.

Problem	Most likely cause	Recommended action
cDNA yield is low	The target RNA may not be efficiently primed through a poly(A) tail or the recommended primer amount may not have been used.	Confirm that the target is poly(A)-tailed eukaryotic mRNA and use 1 uL Oligo(dT)18 in a 20 uL cDNA reaction.
A non-polyadenylated RNA target is not detected	Oligo(dT)18 anneals to poly(A) tails and is not described as a universal primer for all RNA species.	Use Oligo(dT)18 for the poly(A)-tailed mRNA application described in the datasheet; do not assume equivalent priming of non-polyadenylated RNA.
Results vary between RT reactions	Primer amount or storage history may differ between reactions.	Keep the primer at -20°C, avoid freeze-thaw cycles, and use the same 1 uL per 20 uL reaction each time.
Too much or too little primer was added	The primer volume may not match the datasheet recommendation.	Use 1 uL ClearPeak Oligo(dT)18 per 20 uL cDNA synthesis reaction.
Primer was used with an unrelated workflow	The datasheet recommends the primer specifically with EcoScript 5x First Strand cDNA Synthesis Kit.	Use the primer within a validated first-strand cDNA synthesis workflow, following the EcoScript kit instructions when using the recommended system.
Performance changed after storage	Repeated freeze-thaw may have affected the primer preparation.	Use a vial maintained at -20°C with minimal freeze-thaw history.
mRNA targets show inconsistent recovery	The RNA population may differ in poly(A)-tail availability and the RT workflow may not be consistent.	Standardize the RNA input and use the same Oligo(dT)18 amount and cDNA synthesis conditions between samples.

Still having trouble? Confirm that the RNA target is poly(A)-tailed mRNA, use 1 uL Oligo(dT)18 per 20 uL cDNA reaction, and verify -20°C storage with minimal freeze-thaw history.