

Lyophilization-compatible premium hot-start DNA polymerase

Lyo-ready Platinum *Taq*, CG DNA Polymerase

Invitrogen™ Platinum™ *Taq* DNA Polymerase is one of the most reliable, trusted hot-start enzymes available. Stringent hot-start technology renders the polymerase inactive until the initial denaturation step, resulting in highly specific and sensitive PCR assays with the convenience of room temperature reaction setup. Lyo-ready Invitrogen™ Platinum™ *Taq*, CG DNA Polymerase offers the same premium performance as Platinum *Taq* DNA Polymerase, in a highly concentrated (50 U/μL), lyophilization-compatible formulation without glycerol. Lyo-ready Platinum *Taq*, CG DNA Polymerase can be supplied in bulk, as well as packaged and filled to meet your custom requirements.

Product highlights:

- **Stringent hot-start technology**—high specificity, sensitivity, and yields for superior results
- **Highly concentrated, no-glycerol formulation**—convenient for lyophilization, alone or with other assay components
- **Free of contaminating human and *E. coli* DNA, based on sensitive qPCR assays**—minimizes potential false-positive results
- **Designed to be free of third-party intellectual property**—cost-effective

High specificity, sensitivity, and yields

Lyo-ready Platinum *Taq*, CG DNA Polymerase is formulated to enable the highest DNA polymerase performance in PCR assays. It's designed to reliably and consistently amplify DNA from simple as well as complex samples with high specificity, sensitivity, and yields.

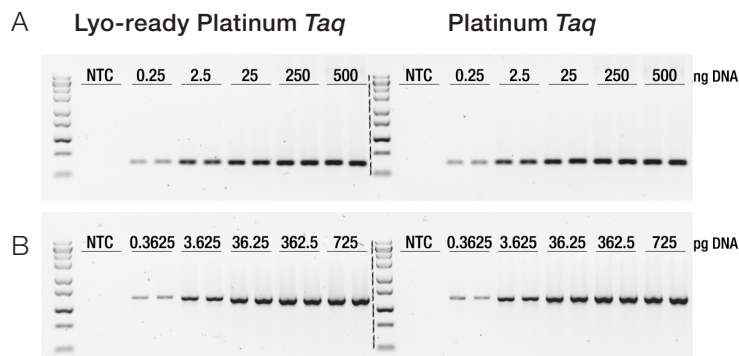


Figure 1. High specificity, sensitivity, and yields with lyo-ready Platinum *Taq*, CG DNA Polymerase. Lyo-ready Platinum *Taq*, CG and Platinum *Taq* DNA Polymerases were used to amplify a 199 bp fragment of human DNA (A) and a 639 bp fragment of *E. coli* DNA (B) from varying amounts of template DNA input in duplicate assays. The lyo-ready enzyme formulation offered sensitivity, specificity, and yields comparable to those of the standard formulation of Platinum *Taq*. NTC = no-template control. DNA ladder: Thermo Scientific™ ZipRuler™ Express DNA Ladder 1.

Robust amplification of complex DNA templates

Lyo-ready Platinum *Taq*, CG DNA Polymerase offers robust amplification of both low- and high-complexity DNA, enabling accurate and reliable results on any type of template.

Ideal for qPCR-based assays

Lyo-ready Platinum *Taq*, CG DNA Polymerase provides sensitive and reproducible qPCR results from a wide range of template DNA amounts, making it an optimal enzyme for qPCR- and RT-qPCR-based assays. The formulation is free of contaminating DNA, for consistent and reliable qPCR assays.

Cost-effective formulation

Lyo-ready Platinum *Taq*, CG DNA polymerase has been developed to offer optimal PCR performance, as well as to help reduce additional royalty and licensing burdens resulting from third-party intellectual property. Thus, it provides an efficient and cost-effective solution for lyophilized PCR and qPCR assays.

Incorporate premium hot-start DNA polymerase into your commercial endpoint and real-time PCR assays to help ensure accurate and reliable PCR results for your customers.

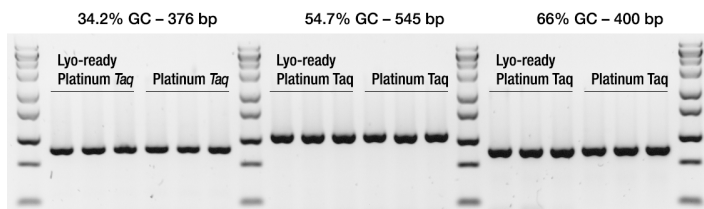


Figure 2. Robust amplification of DNA fragments with different GC content. DNA fragments with different GC content were amplified using lyo-ready Platinum *Taq*, CG and Platinum *Taq* DNA Polymerase in triplicate assays. Equally efficient amplification was achieved with both DNA polymerase formulations. DNA ladder: ZipRuler Express DNA Ladder 1.

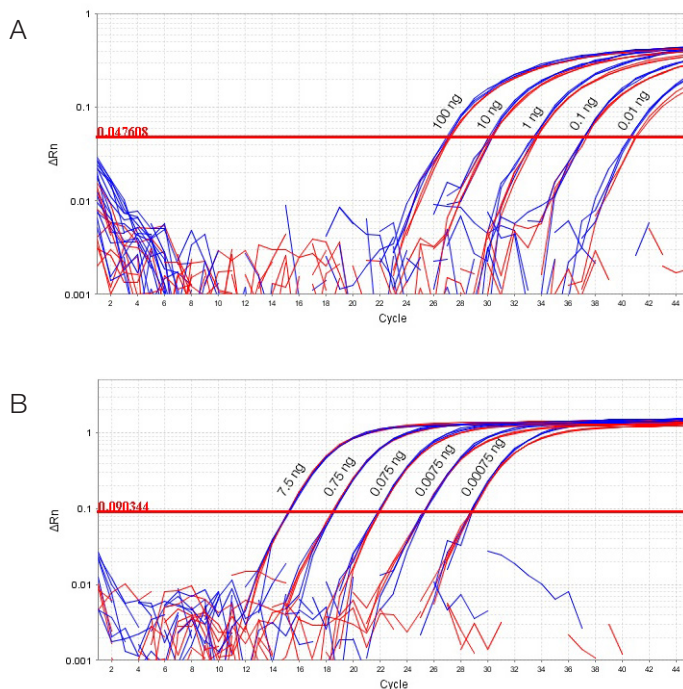


Figure 3. Sensitive, reproducible, and specific qPCR assays. Performance of lyo-ready Platinum *Taq*, CG (blue curves) and Platinum *Taq* (red curves) DNA Polymerases in qPCR assays was evaluated using human *PPP1CA* (A) and *E. coli* 23S (B) TaqMan® Assays and varying amounts of human or *E. coli* input DNA. Equally efficient and sensitive amplification was achieved with both DNA polymerase formulations. No amplification was observed in the no-template control, confirming that the formulations are free of contaminating human and *E. coli* DNA based on this detection method.

To learn more about lyo-ready Platinum *Taq*, CG, contact our License and Commercial Supply team at thermofisher.com/oem-partner

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