

Ampliqon Taq DNA Polymerase Glycerol Free 50 U/μl

For lyophilization of PCR master mixes with high stability

Key features:

- Highly concentrated Taq DNA polymerase
- Glycerol free storage buffer – for lyophilization
- High stability
- Ideal for development of PCR kits and high throughput assays

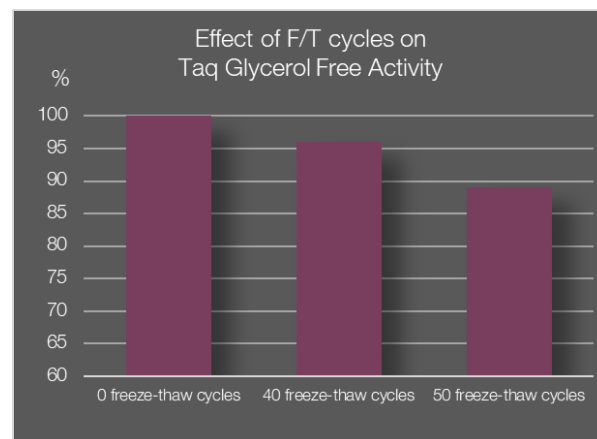
The highly concentrated Taq Glycerol Free 50 U/μl from Ampliqon is well suited for further manufacturing and lyophilization of PCR master mixes intended for example for diagnostic purposes. Taq Glycerol Free offers high performance and stability. Normally glycerol serves as a cryo-protectant within the storage buffer to protect the DNA polymerase during freezing conditions. Taq Glycerol Free was developed in order to be highly stable in a glycerol free storage buffer.

High stability of Taq DNA Polymerase Glycerol Free

To test the resistance of Ampliqon Taq DNA Polymerase Glycerol Free to freezing and thawing, a freeze-thaw test was performed applying 50 freeze-thaw cycles. Activity of Taq DNA Polymerase Glycerol Free after 40 and 50 freeze-thaw cycles, respectively, was measured using real-time PCR amplification and compared to a standard curve of Taq DNA polymerase activities. The standard curve was prepared by diluting the initial sample without freeze-thaw cycles.

All samples were diluted to a concentration, where the amount of Taq polymerase was limiting, thereby allowing to monitor changes in enzyme activity. Activity of DNA Polymerase is plotted against numbers of freeze-thaw cycles; 0, 40 and 50, respectively. The estimated activity after 40 freeze-

thaw cycles was slightly below 100 % activity, indicating a minor decrease in activity. After 50 freeze-thaw cycle, approximately 90 % of the full activity for Taq DNA polymerase was retained.



Applications:

- Lyophilization of PCR kits for diagnostic purposes
- HTP assays
- Automation
- DNA target detection
- Detection of pathogens
- Gene expression analysis

Product	Size*	Cat #
Taq DNA Polymerase Glycerol Free 50 U/μl	25 000 Units	A490010
	250 000 Units	A490012
	2 000 000 Units	A490044
Taq DNA Polymerase Glycerol Free 5 U/μl	500 Units	A100003
	1 000 Units	A100004
	5 000 Units	A100007

*1 unit / 50 μl reaction size