



STABILITY test of the Ampliqon Master Mix



Ampliqon Taq DNA Polymerase is a very stable enzyme with a half-life time of 40 minutes at 95°C. The half-life time rapidly increases with only a few degrees of temperature drop. To evaluate the thermostability we tested the activity of Taq polymerase at three different temperatures.

Our results show that it is tolerant to incubation at elevated temperatures for long periods without losing activity: **at 40 °C for 2 weeks; at 25 °C for 2 months and at 5 °C for 18 months.**

Ampliqon Taq DNA polymerase can withstand a high number (> 40) of freeze-thaw cycles with only slight decrease in activity. At lower temperatures, Taq polymerase is stable for even longer time. Storage at -20 °C is therefore recommended in order to guarantee maximal shelf life.

However, if you forget your enzyme on your lab bench even for several days, no harm is done due to the high stability of Taq polymerase at room temperature.

Temperature Condition	40 ± 2 °C		25 ± 2 °C		5 ± 3 °C	
	Time point	Activity Test (%)	Time point	Activity Test (%)	Time point	Activity Test (%)
	2 weeks	100	2 months	100	18 months	100
	4 weeks	70	4 months	95	24 months	only a slight decrease of activity
	6 weeks	50	6 months	70-60		
	8 weeks	10	8 months	60		

For further information; please check:

<https://ampliqon.com/en/ordering/storage-and-shipping-conditions-pcr-enzymes/stability-test-taq-dna-polymerase/>

