

HelixAmp™ Hi-Fidelity NGS polymerase

Kit Contents

HelixAmp™ Hi-Fidelity NGS polymerase	
Cat. No.	HFNGS100 (100rxns)
Hi-Fidelity NGS polymerase	0.2ml
5x NGS Buffer	1.0ml
Instructions for Use	1ea

Description

HelixAmp™ Hi-Fidelity NGS polymerase is designed for unparalleled precision in next-generation sequencing(NGS). This hot-start version of Hi-Fidelity DNA Polymerase(a modified *Pfu* DNA polymerase) ensures for robust and accurate DNA amplification, minimizing errors and preserving the integrity of your genetic data. The supplied 5x NGS buffer, optimized for the NGS library construction, contains buffering agents, salt, magnesium, dNTPs, and stabilizer.

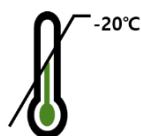
Application

NGS library amplification

Storage buffer

50mM Tris-HCl (pH 8.0), 100mM KCl,
0.1mM EDTA, 1mM DTT, stabilizers,
50% Glycerol

Storage



Store below -20°C

Shelf life



12 months

Quality Control

By Nanohelix's ISO 13485-certified quality management system, each lot of **HelixAmp™ Hi-Fidelity NGS polymerase** was tested against predetermined specifications to ensure consistent product quality.



Hi-Fidelity NGS polymerase

Protocol

1. Recommended amount of template DNA

Human genomic DNA: 10 ~ 500ng

E.coli genomic DNA: 100 ~ 200ng

Purified plasmid DNA: 10pg ~ 10ng

cDNA: 25 ~ 750ng

2. Mix the following components in a PCR tube

Components	Volumes (μ l)
Template	X μ l
5x NGS Buffer	10 μ l
Primer 1 (10 μ M)	2~5 μ l
Primer 2 (10 μ M)	2~5 μ l
Hi-Fidelity NGS polymerase	2 μ l
RNase-free Water	to 50 μ l

3. PCR condition

Temperature & Time	Cycles
95°C, 5 min	x 1
98°C, 10 sec	x 30**
65°C, 75 sec *	
65°C, 10 min	x 1

* Extended reaction times may be necessary for larger insert lengths.

The reaction temperature can be adjusted based on the primers utilized.

For the primers having lower T_m (less than 65°C), use 30 sec at the T_m and 45 sec at 65°C is recommended.

** Modify the reaction cycles for optimal amplification as needed.

Products

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