

## HelixAmp™ Ready-2x-Go [*Premium-Taq*] (8-strip tube type)

### Kit Contents

HelixAmp™ Ready-2x-Go [ <i>Premium-Taq</i> ] (8-strip tube type)				
Cat. No.	PMT007-96	PMT007-480	PMDT007-96	PMDT007-480
Packing size	8-strip x 12/plate	8-strip x 12/plate x 5plate	8-strip x 12/plate	8-strip x 12/plate x 5plate
Ready-2x-Go [ <i>Premium-Taq</i> ]	without dye	without dye	with dye	with dye
Instructions for Use	1ea	1ea	1ea	1ea

### Description

**HelixAmp™ Ready-2x-Go [*Premium-Taq*] (8-strip tube type)** are optimized mixtures of HelixAmp™ *Premium-Taq* Polymerase with reaction buffer and dNTPs as 2-fold concentration. This pre-mixed formulation is designed to save time and reduce the error and contamination opportunities. HelixAmp™ Ready-2x-Go [*Premium-Taq*] mixture contains NanoHelix's *Premium-Taq* Polymerase, which is an anti-*Taq* antibody complex form and ideal for automatic hot-start PCR. HelixAmp™ Ready-2x-Go [*Premium-Taq*] provides the most suitable condition for efficient and reproducible PCR.

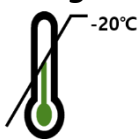
### Contents

**HelixAmp™ Ready-2x-Go [*Premium-Taq*] (8-strip tube type)** are the mixtures of HelixAmp™ *Premium-Taq* Polymerase, PCR buffer, dNTPs and stabilizing agents. For the optimization of difficult PCR, N-Solution™ is separately provided.

### Store

Store the products containing dye below -20°C and keep away from light during storage.

#### Storage



Store below -20°C

#### Shelf life



12 months

## Quality Control

By NanoHelix's ISO 13485-certified Quality Management System, each lot of **HelixAmp™ Ready-2x-Go [*Premium-Taq*] (8-strip tube type)** was tested against predetermined specifications to ensure consistent product quality.

## Protocol

### 1. Recommended amount of template DNA.

Human genomic DNA : 10 ~ 100ng

Bacterial genomic DNA : 5 ~ 50ng

Purified plasmid or phage DNA : 1 ~ 5ng

### 2. Prepare the PCR Pre-Mix tubes according to the number of test sample.

### 3. Add following components to each tube containing 15μl of HelixAmp™ Ready-2x-Go [*Premium-Taq*] Premix.

Components	Volumes (μl)
Template	X μl
Forward Primer (10μM)	1μl
Reverse Primer (10μM)	1μl
N-Solution™ [optional]	0 ~ 3μl

※ **N-Solution™** is an additive altering the binding behavior of primer and template and can help the amplification that do not work well under standard PCR condition. Especially, **N-Solution™** can be used for the amplification of problematic template, such as high G+C content and repeat sequence regions. The optimal concentrations of **N-Solution™** are vary upon the primer-template sets and should be set by adding into the PCR reaction mixture from 2 to 10% volume. Most of the PCR reactions are not required the **N-Solution™** and we recommend to use the **N-Solution™** only in case of the PCR amplification is not works well or too much non-specific products are observed.

### 4. Adjust reaction volume to final 30μl with RNase-free Water and mix well.

## 5. Perform the PCR with following condition.

Temperature & time	Cycles
95°C, 2 min	x 1
95°C, 20 sec	x 25 ~ 40
Annealing Temp., 40 sec	
72°C, 1 min/kb (Expected size of product)	
72°C, 5 min	x 1

Annealing Temp. =  $T_m - (4 \sim 6^\circ\text{C})$

$T_m$  (Melting Temp.) =  $[4^\circ\text{C} \times (\text{G} + \text{C})] + [2^\circ\text{C} \times (\text{A} + \text{T})]$

## Precautions

Store the product containing dye in a place protected from light, as prolonged exposure to light may degrade its performance.

## Products

Cat. No.	Products	Size
PMT007-96	HelixAmp™ Ready-2x-Go [ <i>Premium-Taq</i> ] (8-strip tube type)	96rxns
PMT007-480	HelixAmp™ Ready-2x-Go [ <i>Premium-Taq</i> ] (8-strip tube type)	480rxns
PMDT007-96	HelixAmp™ Ready-2x-Go [ <i>Premium-Taq</i> ] (8-strip tube type, <b>with dye</b> )	96rxns
PMDT007-480	HelixAmp™ Ready-2x-Go [ <i>Premium-Taq</i> ] (8-strip tube type, <b>with dye</b> )	480rxns