SciPhi™

SciPhi™ Coloured PCR Master Mix (2x)

#NXG322

Contents and storage

Catalogue No.	Product Components		
	SciPhi™ Coloured PCR Master Mix (2X)		Water, Nuclease-free
	Application	Volume	Volume
NXG322-L	200 rxn	4x 1.25 mL	4x 1.25 mL
NXG322-M	100 rxn	2x 1.25 mL	2x 1.25 mL
NXG322-S	50 rxn	1x 1.25 mL	1x 1.25 mL
NXG322-XS	5 rxn	125 µL	125s µL
Store all the components at -20°C			

Product Description

SciPhi™ Coloured PCR Master Mix (2X) is a convenient, ready-to-use solution comprising DNA polymerase, a specially optimized green buffer, MgCl2, and dNTPs. It is supplement with two tracking dyes and a density reagent, this mix enables direct loading of PCR products onto a gel. It has a 2X concentration and maintains the full functionality of DNA polymerase. The inclusion of tracking dyes ensures compatibility with various downstream applications such as DNA sequencing, ligation, and restriction digestion, without compromising PCR performance. This master mix excels in robustly amplifying DNA fragments, reaching up to 6 kb from genomic DNA and up to 20 kb from viral DNA.

The SciPhi™ PCR Master Mix is suitable for various PCR applications, including high-throughput PCR, routine PCR, and RT-PCR. Its optimized formulation ensures high reproducibility, making it easier to obtain consistent results.

The product is also ideal for generating PCR products that can be used for TA cloning. This makes it a versatile solution for researchers looking to clone their PCR products for downstream applications.

Using the SciPhi™ Coloured PCR Master Mix can simplify and streamline your PCR workflows, making it easier to achieve reliable and accurate results.

The SciPhi™ Coloured PCR Master Mix is a trusted solution that has been extensively tested and validated for quality and performance.

Composition of Coloured PCR Master Mix (2X)

SciPhi™ Coloured PCR Master Mix contains DNA polymerase, 2X Green buffer, dATP, dCTP, dGTP and dTTP, 0.4 mM each, and 4 mM MgCl2. Green buffer is an exclusive formulation optimized for robust performance in PCR. It contains a density reagent and two dyes to monitor electrophoresis progress: the blue dye responsible for migration of 3-5 kb DNA fragments and the yellow dye migrates faster than 10 bp DNA fragments in 1% agarose gel. The dyes have maximum absorption peaks at 424 nm and 615 nm respectively.

Instruction for use

1. Thaw at room temperature then gently vortex and briefly centrifuge Coloured PCR Master Mix.
2. Place a thin-walled PCR tube on ice and add the following components for each 50 µl reaction volume.

Component	Required Volume / Concentration
PCR coloured Master Mix (2X)	25 µl
Forward primer	0.5-1.0 µM
Reverse primer	0.5-1.0 µM
Template DNA	10 pg - 1 µg
Water, nuclease-free	upto 50 µl
Total volume	50 µl

3. Gently vortex the samples and spin down.
4. Perform PCR using the recommended thermal cycling conditions outlined below:

Step	Temp.	Time	Number of cycles
Initial denaturation	95°C	1-3 min	1
Denaturation	95°C	30 s	25-40
Annealing	Tm -5°C	30 s	
Extension	72°C	1 min/kb	
Final Extension	72°C	5-15 min	1

Guidelines for preventing contamination of PCR reaction

- Prepare DNA sample, set up the PCR mixture, perform thermal cycling and analyse PCR products in separate areas.
- Set up PCR mixtures in a laminar flow cabinet equipped with an UV lamp.
- Use reagent containers dedicated for PCR and fresh gloves for DNA purification and reaction set up.
- Use pipette tips with aerosol filters to prepare DNA samples and perform PCR set up in dedicated area.
- It is recommended to always use “no template control” (NTC) reactions to check for contamination.

Troubleshooting

For troubleshooting, please email us at techteam@nextgenlife.com; info@nextgenlife.com.

NEXTGEN LIFE SCIENCES PVT. LTD.

F 44-45, Pankaj Central Market, I. P. Extension, Patparganj, Delhi-110092