Reference Guide

# Universal PCR Mix 2X with Additive



Store at - 20°C PI/UPMA-00

**Product Description** 

**Universal PCR Mix with Additive** is a Premixed 2X concentrated reagent ready to use for Endpoint Polymerase chain reactions (PCR).

The premix 2X reagent is supplied along with an additive which helps in easy experimental setup, avoids nonspecific amplifications and is useful to efficiently amplify GC rich sequences.

## Features

Catalog

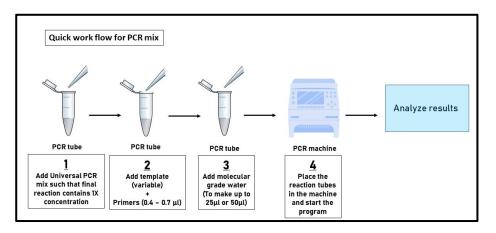
HL - UPMA-100

- Contains Tag Polymerase Enzyme to provide a better yield with 5'-3' Polymerase, and Exonuclease Activity
- Includes buffer, and dNTPs for ready to use PCR applications
- Includes additive for enhancing amplification of GC rich sequences
- High specificity and sensitivity

**Description** 

1.25ml

• Buffer enhancements guarantee performance and reliability



## Reagents supplied

- Universal PCR Mix (2X) (1.25ml)
- Additive (0.1 mL)

## Storage condition

Universal PCR Mix (2X) and Additive should be stored at -20°C

#### Recommended reaction set-up for PCR

Prepare PCRs using required volumes of freeze-thawed components in the PCR hood as recommended in the table below

PCR Protocol	
Component	Volume(μL)
Universal PCR Mix 2X	12.5
Additive	0.5-1.0
Forward primer (10 pm/µL)	0.4-0.7
Reverse primer (10 pm/μL)	0.4-0.7
Template DNA	Variable (user defined)
Nuclease Free Water	Variable (user defined)
Total Volume	25 μL

The reaction set up is for guidance and it can be modified according to the user's need. The current product is sufficient for 100 reactions if the above protocol is used.

Note: The additive concentration needs to be optimized based on the GC content of the template

#### For Research Use Only





**Note:** Mix the vials with the reaction set up by gentle tapping. A short spin is recommended after gentle mixing to ensure that the reagent mix is not sticking to the walls of the PCR tube

# **Thermocycling Protocol**

Place the tubes in the Thermal Cycler and start the Polymerase chain reaction protocol. Below is a general template for PCRs and should be optimized for good results

Recommended PCR program				
Operation	Temp	Time	Cycles	
Initial denaturation	95°C	1-5 min	1	
Denaturation	95°C	30 sec	35-40 cycles	
Annealing	Tm-°C	30-60 sec		
Extension	72°C	1min/kb		
Final Extension	<b>72</b> °C	5 – 10 min	1	

# **Applications**

- Routine PCR Reactions
- cDNA amplification

- Generating PCR products for TA cloning
- Amplification of GC rich templates

## Other PCR products from Huwel LifeSciences that you may be interested

Product description	Catalogue No.
Universal PCR Mix (2X) with UDG ***	HL – UUPM – 100 – 1.25ml
UltraFast Real Time PCR Mix 5X	HL - UFPCM - 100 - 500μl HL - UFPCM - 200 - 1ml
UltraFast Real Time PCR Mix 5X with UDG	HL - UUFPCM - 100 - 500μl HL - UUFPCM - 200 - 1ml
Taq Polymerase Enzyme (5U/μl)	HL - Taq - 50 - 250Units HL - Taq - 100 - 500Units HL - Taq - 200 - 1000Units
HotStart Taq Polymerase Enzyme (5U/μl)	HL - HSTaq - 50 - 250Units HL - HSTaq - 100 - 500Units HL - HSTaq - 200 - 1000Units
QuickStart Taq Polymerase Enzyme (5U/μl)	HL - QSTaq - 50 - 250Units HL - QSTaq - 100 - 500Units HL - QSTaq - 200 - 1000Units
	Universal PCR Mix (2X) with UDG ***  UltraFast Real Time PCR Mix 5X  UltraFast Real Time PCR Mix 5X with UDG  Taq Polymerase Enzyme (5U/µl)  HotStart Taq Polymerase Enzyme (5U/µl)

<sup>\*\*\*</sup> This reagent is with Uracil DNA Glycosylase (UDG)

For further information on protocols and details, please contact our technical support: <a href="mailto:info@huwellifesciences.in">info@huwellifesciences.in</a>



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