

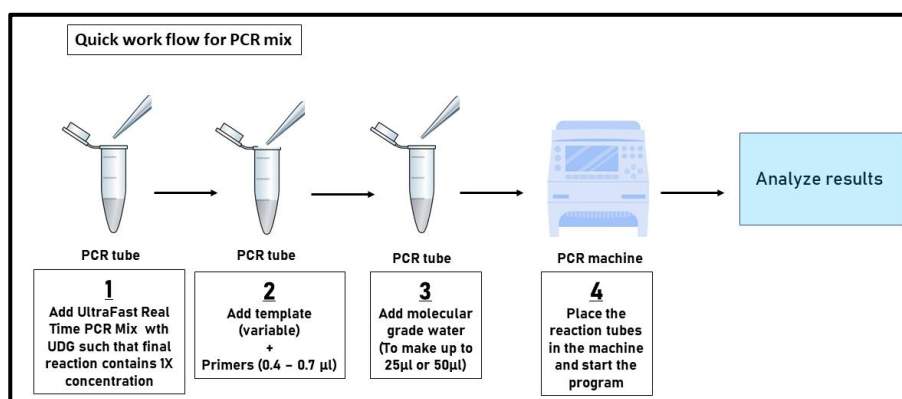
## Product description

UltraFast Real Time PCR Mix 5X with UDG is a ready-to-use concentrated reagent for Polymerase chain reactions (PCR). The easy-to-use PCR mix reduces the experimental time to half, making it ideal for fast-paced labs. The reagent comes with QuickStart Taq Polymerase Enzyme, Uracil DNA Glycosylase (UDG), and dNTPs in one tube in 5X concentration. The user can right away start the assays just by adding the template and the respective primer-probe mix. The UltraFast Real-Time PCR Mix 5X with UDG is ideal for CHIP qPCRs and is NOT recommended for regular PCRs.

The reagent along with QuickStart Taq Polymerase Enzyme, dNTPs come with dUTP and UDG enzyme. The incorporation of dUTP in place of dTTP to the growing strand during PCR makes it an ideal degradation target for the UDG enzyme. The UDG enzyme gets inactivated at higher temperatures and therefore does not interfere with the amplification while clearing out any potential contamination that may be carried over from the previous experiments. The mix is available with and without UDG to suit your experimental needs.

## Features

- Contains QuickStart *Taq* Polymerase Enzyme to provide a better yield with 5'-3' Polymerase and Exonuclease activity
- Includes reaction buffer, dNTPs, and UDG enzyme for ready to use PCR applications
- High specificity and sensitivity
- Buffer enhancements guarantee performance and reliability



## Reagents Provided

UltraFast Real-Time PCR Mix 5X with UDG

## Storage conditions

UltraFast Real-Time PCR Mix 5X with UDG should be stored at -20°C

## Recommended reaction set-up for PCR

Prepare PCRs as recommended in the table below

PCR Protocol	
Component	Volume( $\mu$ L)
UltraFast Real Time PCR Mix with UDG	5.0
Forward primer (10 pm/ $\mu$ L)	0.4-0.7
Reverse primer (10 pm/ $\mu$ L)	0.4-0.7
Template DNA	Variable (user defined)
Nuclease Free Water	Variable (user defined)
<b>Total Volume</b>	<b>25</b>

The reaction setup 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:** Mix the vials with the reaction set up by gentle tapping. A short spin is recommended after

## Reference Guide

gentle mixing to ensure that the reagent mix is not sticking to the walls of the PCR tube

### Thermo Cycling 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

**Note: UltraFast Real Time PCR Mix 5X with UDG is NOT recommended for regular PCR program with longer annealing and extension times.**

Recommended PCR Program			
Operation	Temp	Time	Cycles
Initial denaturation	95°C	1 min	1
Denaturation	95°C	1-5 sec	30-35 cycles
Annealing & Extension	60°C	1 -5 sec	

### Applications

- Primer extension
- Genotyping
- CHIP based qPCR
- Pathogen detection

Other PCR products from Huwel LifeSciences that you may be interested

S.No.	Product description	Catalogue No.
1.	UltraFast Real Time PCR Mix 5X***	HL - UFPCM - 100 - 500µl HL - UFPCM - 200 - 1ml
2.	Taq Polymerase Enzyme (5U/µl)	HL - Taq - 50 - 250 Units HL - Taq - 100 - 500 Units HL - Taq - 200 - 1000 Units
3.	HotStart Taq Polymerase Enzyme (5U/µl)	HL - HSTAQ - 50 - 250 Units HL - HSTAQ - 100 - 500 Units HL - HSTAQ - 200 - 1000 units
4.	QuickStart Taq Polymerase Enzyme (5U/µl)	HL - QSTAQ - 50 - 250 Units HL - QSTAQ - 100 - 500 Units HL - QSTAQ - 200 - 1000 Units

\*\*\* This reagent is without Uracil DNA Glycosylase (UDG)

For further information on protocols and details, please contact our technical support:  
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