

Allele

All^{ele}-In-One PCR MasterMix

Description

2X Allele-In-One PCR MasterMix is a pre-mixed solution containing Taq DNA polymerase, MgCl₂, dNTPs, an inhibitor of Taq at low temperatures, and optimal PCR reaction buffers. The MasterMix contains all necessary components for PCR; template and primers are not included. Allele-in-one PCR MasterMix is optimized for consistent use in Allele's LineSilence™ productions and other routine PCR amplification.

The 1.1X Allele-In-One PCR MasterMix is formulated for the utmost convenience. It contains the same components as the 2X Mix except the final concentrations are 1.1X. Add only PCR primers and template with a combined volume of roughly 1/10 of the final reaction volume before running the reactions.

Both 2X and 1.1X Mixes come with pre-added loading dye at no extra cost. The inert red colored dye does not interfere with PCR reactions. PCR products can be directly loaded onto the gel after completion of reactions

Features

RT-PCR Ready: Reverse transcription can be performed in all Allele PCR mixes by simply adding reverse transcriptase

Convenient: Reduces time required to assemble PCR reactions. HQ loading dye included at no additional charge.

Fast: Only need to add template and primers

Scalable: Can be scaled to any reaction volume required

Reliable: Strict quality-control provides consistency and certainty in our products

Quality Control

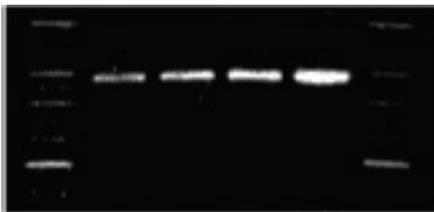
We test each batch of the enzyme and MasterMix preparation using various PCR reactions, in comparison with similar products from other sources.

Box 1 | Product List

2X MasterMix	
ABP-PP-MM02961	96 x 10µl reactions
ABP-PP-MM02965	96 x 50µl reactions
1.1X MasterMix	
ABP-PP-MM11961	96 x 10µl reactions
ABP-PP-MM11965	96 x 50µl reactions

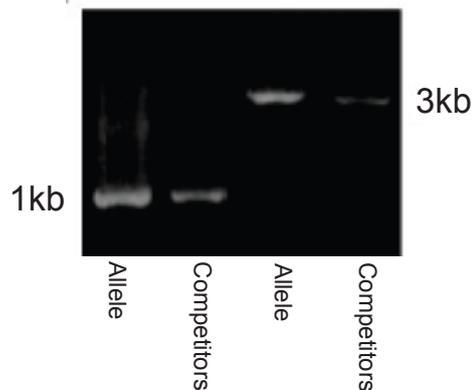
♦Catalog # **ABP-PP-MM02961** is included in All^{ele}-In-One Mouse Tail Direct PCR Kit, available separately as **Catalog # ABP-PP-MT02100** (100 Rxns) & **ABP-PP-MT02500** (500Rxns).

Box 2 | Dose Response



Amplification has low background and shows dose response. Amplification of a 0.9kb pesT region from 170kb T4 phage genome with 2X Allele-In-One PCR MasterMix, at 25, 28, 31, and 35 PCR cycles.

Box 3 | MasterMix Comparison



Allele-In-One PCR MasterMix consistently generates higher amount of PCR products compared to other commonly used PCR mixtures.

Recommended Use

Allele recommends the following assembly for 50µl and 10µl reactions using 2X PCR MasterMix:

For 50µl PCR reaction:

2X PCR MasterMix 25µl

Template DNA 1-10 ng**

Forward Primer ~0.5-1µM final**

Reverse Primer ~0.5-1µM final**

Fill to 50µl final volume with nuclease-free water.

Proceed to using a thermo-cycler for the PCR reaction.

For 10µl PCR reaction:

2X PCR MasterMix 5µl

Template DNA 0.02-2 ng**

Forward Primer ~0.5-1µM final**

Reverse Primer ~0.5-1µM final**

Fill to 10µl final volume with nuclease-free water.

Proceed to using a thermo-cycler for the PCR reaction.

Allele recommends the following assembly reactions using 1.1X PCR MasterMix:

For 27.5µl PCR reaction:

1.1X PCR MasterMix 25µl

Template DNA 1-10 ng**

Forward Primer ~0.5-1µM final**

Reverse Primer ~0.5-1µM final**

The combined volume of template and primers should be about 2.5 µl. Do not add nuclease-free water, there is no need to adjust final reaction volume.

Proceed to using a thermo-cycler for the PCR reaction.

For 10µl PCR reaction:

1.1X MasterMix is particularly suited for high throughput colony screening. Using 10 µl reaction pre-aliquoted in PCR reaction thin-wall tubes, user needs only add primers and use toothpicks to transfer E. coli cells in colonies to the reaction.

Proceed to using a thermo-cycler for the PCR reaction.

****Template and primer concentrations vary based on primer pair.**

Additional Features

◆Both 2X and 1.1X MasterMixes come with pre-added loading dye. The inert red colored dye does not interfere with PCR reactions.

◆PCR products can be directly loaded onto gel after completion of reactions.