

CamTaq®2X Mastermix Gold is a formulation of CamTaq® DNA Polymerase that offers a convenient and ready-to-load solution. The mastermix already contains polymerase, buffer and dNTPs at an optimized concentration, all you need to add is your template and primers. This leads to increased consistency between your results and saves time in the reaction setup. As the mastermix already contains a tracking dye, the reaction can be loaded directly onto an agarose gel without the additional step of adding loading dye. The tracking dye also helps to ensure that the mastermix was added and the reaction was properly mixed. The tracking dye co-migrates with the running front during separation on an agarose gel and therefore helps to monitor the progression of the electrophoresis. In a 1% agarose gel, the yellow dye runs below 50 bp.

If the sample will be used for fluorescence and absorbance readings, we recommend a clean-up step to remove the dye as it may interfere with some applications.

The mastermix contains MgCl₂ at a concentration that results in a final concentration of 1.5 mM in the 1X reaction.

Biological Source

CamTaq® DNA Polymerase is recombinantly produced in bacteria.

Enzyme Concentration

1 U / 50 µl reaction

Unit Definition

One unit is defined as the amount of enzyme required to catalyze the incorporation of 10 nanomoles of dNTPs into acid-insoluble material in 30 minutes at 74°C. The reaction conditions are specified below under Standard DNA Polymerase Assay Conditions.

Mutation Rate

2.28 x 10⁻⁵