

Thermo Scientific 2x Thermo-Start High Performance PCR Master Mix

- Description:** Thermo-Start[®] DNA Polymerase is a chemically modified (patented) version of Thermoprime Plus DNA Polymerase that is inactive until 'switched on' by high temperature incubation. **The enzyme requires an activation step at 95°C for 15 minutes, although a range of temperatures and times can be used, depending on requirements (93–96°C, 10–20 minutes).** For extra specificity, an incremental activation can be used, where the enzyme is activated in steps according to the user's wishes. This type of stepwise activation, such as 2 minute incubations at 95°C for the first 7–8 cycles, ensures a highly specific reaction where the amount of active enzyme is increased during the reaction.
- Ordering Information:**
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| | AB-1147/a | 2 x 1.25ml vials | 100 x 50µl reactions |
| | AB-1147/b | 16 x 1.25ml vials | 800 x 50µl reactions |
| | AB-1147/s | 1 x 0.5ml sample pack | 20 x 50µl reactions |
- Kit Components:** Each vial contains a 2x working concentration of Thermo-Start[®] Master Mix. The addition of template and primers results in a final reaction volume of 50µl, containing:
- 1 x Thermo-Start[®] High Performance reaction buffer
 - 1.25 units Thermo-Start[®] DNA Polymerase
 - 0.2mM each of dATP, dCTP, dGTP and dTTP
 - 1.5mM MgCl₂
- Protocol:** For a 50µl reaction, take 25µl of 2x Thermo-Start[®] High Performance Master Mix and add template, primers and water in a 25µl volume (scale up or down accordingly if required).
- Associated Activities:** The enzyme has a 5' to 3' polymerisation-dependent exonuclease replacement activity but lacks a 3' to 5' exonuclease activity.



Storage Conditions: Store at -20°C until ready for use for up to 1 year. Avoid freeze thawing. Shipped on ice.

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