

1.1X ReddyMix™ PCR Master Mix (1.5mM MgCl₂)

Description: PCR ReddyMix™ Master Mix is a ready-to-use master mix. It is a convenient way of amplifying DNA fragments without the need to thaw individual components, reducing the risk of contamination and pipetting errors. The Thermoprime Plus DNA Polymerase, dNTPs, reaction buffer and magnesium chloride are all present in the mix. ReddyMix™ Master Mix also contains a dye and precipitant to facilitate gel loading.

Ordering	AB-0575-LD/A	2 x 1.8ml vials	80 x 50µl rxns
Information:	AB-0575-LD/B	20 x 1.8ml vials	800 x 50µl rxns
	AB-0575-LD/C	200 x 1.8ml vials	8,000 x 50µl rxns

Enzyme Source: *Thermus aquaticus*

Kit Components: Each vial contains 1.8ml of a 1.1X working concentration PCR Master Mix sufficient for 40 x 50µl reactions. The addition of the template and primers results in a final reaction volume of 50µl, containing:

1.25 units	Thermoprime Plus DNA Polymerase
75mM	Tris-HCl (pH 8.8 at 25°C)
20mM	(NH ₄) ₂ SO ₄
1.5mM	MgCl ₂
0.01% (v/v)	Tween® 20
0.2mM	each of dATP, dCTP, dGTP and dTTP
	Precipitant and red dye for electrophoresis

Protocol: For a 50µl reaction, take 45µl of PCR Master Mix and add template, primers and water in a 5µl volume (scale up or down accordingly if required). After PCR, a sample (10–30% of reaction) may be loaded directly on a gel.

For Research Purposes Only

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- Associated Activities:** Thermoprime Plus DNA Polymerase has 5' to 3' polymerization and exonuclease activity but lacks 3' to 5' exonuclease activity (proofreading).
- Storage Conditions:** Store at -20°C until ready for use for up to 1 year. Avoid freeze thawing. The vial can be stored at 4°C for up to 1 month. Shipped on ice within the UK and on dry ice for international and within the US.
- Tip:** The gel precipitant in ReddyMix™ Master Mix causes a slight increase in the thermal mass of the reaction mix. In a small number of cases this may necessitate some minor re-optimization of the thermal cycler programme. If this is the case we suggest increasing the temperature of the denaturation step by 1–2°C and decreasing the temperature of the annealing step by 1–2°C. Alternatively, increase the duration of each step by 5-10 seconds.

Use of this product is covered by one or more of the following US patents and corresponding patent claims outside the US: 5,079,352, 5,789,224, 5,618,711, 6,127,155 and claims outside the US corresponding to US Patent No. 4,889,818. The purchase of this product includes a limited, non-transferable immunity from suit under the foregoing patent claims for using only this amount of product for the purchaser's own internal research. No right under any other patent claim (such as the patented 5' Nuclease Process claims in US Patents Nos. 5,210,015 and 5,487,972), no right to perform any patented method, and no right to perform commercial services of any kind, including without limitation reporting the results of purchaser's activities for a fee or other commercial consideration, is conveyed expressly, by implication, or by estoppel. This product is for research use only. Diagnostic uses under Roche patents require a separate license from Roche. Further information on purchasing licenses may be obtained by contacting the Director of Licensing, Applied Biosystems, 850 Lincoln Centre Drive, Foster City, California 94404, USA.