

Manual

MasterAmp 10X PCR Enhancer

For Research Use Only. Not for use in diagnostic procedures.

MasterAmp 10X PCR Enhancer is part of the Epicentre™ product line, known for its unique genomics kits, enzymes, and reagents which offer high quality and reliable performance.

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1. Introduction

The MasterAmp 10X PCR Enhancer (with betaine)* substantially improves the specificity and yield of PCR amplification reactions, especially templates containing a high GC content or secondary structure.1 MasterAmp PCR Enhancer (with betaine) lowers the melting temperature of GC-rich regions to a temperature more similar to AT regions. This results in destabilisation of double-stranded regions, limiting DNA polymerase pausing, thereby increasing amplification yields. The MasterAmp PCR Enhancer (with betaine) can be used with a wide variety of DNA polymerases. MasterAmp 10X PCR Enhancer (with betaine) is available in a 10 mL size.

2. Product designations and kit components

Product	Kit size	Catalogue number	Reagent description	Part number	Volume
MasterAmp 10X PCR Enhancer with Betaine	10 mL	ME81210	MasterAmp 10X PCR Enhancer (with Betaine)	SS000026-D3	10 mL

3. Product specifications

Storage: Store only at -20 °C in a freezer without a defrost cycle.

Quality control: MasterAmp 10X PCR Enhancer is function-tested in a PCR containing: 200 µM dNTPs, 300 ng human genomic DNA, 12.5 pmol of each *ApoE* primer and 1.25 U AmpliTherm™ DNA polymerase in 10 mM Tris-HCl (pH 8.3), 50 mM CaCl₂ and 1.5 mM MgCl₂ to produce a 268-bp amplification product.

Contaminating activity assays: MasterAmp 10X PCR Enhancer is free of detectable DNA exonuclease, endonuclease and ribonuclease activities.

4. Reference

1. Weissensteiner T and Lanchbury JS, 1996, *BioTechniques* 21, 1102.

5. Further support

If you require any further support, please do not hesitate to contact our Technical Support Team: techsupport@lgcgroup.com.

*Use of betaine in DNA polymerase reactions, including, but not limited to use for PCR or DNA sequencing, is covered by U.S. Patent No. 6,270,962, European Patent No. 0742838, German Patent No. DE4411588C1 and other patents or patent applications in the U.S. and other countries that are either assigned or exclusively licensed to LGC Biosearch Technologies™. Purchase of a product from Biosearch Technologies that contains betaine and a thermostable DNA polymerase is accompanied by a limited nonexclusive license for the purchaser to use the purchased product solely for life science research, whether the purchaser performs research in a not-for-profit or a for-profit organisation. However, if the product does not contain a thermostable DNA polymerase in addition to betaine, all for-profit organisations require a license from Biosearch Technologies in order to use betaine or a product that contains betaine in DNA polymerase reactions for research applications, and not-for-profit organisations require a license if the product, the research or the result of the research is transferred to or obtained for or on behalf of a for-profit organisation. Licenses are also available to use of betaine in DNA polymerase reactions for human or animal diagnostics, screening or other fields of use. Please contact Biosearch Technologies for information related to such licenses.



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