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Isotherm2G DNA polymerase

#8801

Store at -20°C

Contents

Isotherm2G DNA polymerase is supplied as a 8 U/μl solution containing glycerol. It comes together with a 10x reaction buffer optimized for isothermal amplifications.

Description

Isotherm2G DNA polymerase is a mesophilic DNA polymerase, which synthesizes DNA from both DNA and RNA templates with a high strand displacement activity. Isotherm2G is the next generation of the original Isotherm DNA polymerase with further improved reverse transcription activity. The temperature optimum (between 55-70°C) renders Isotherm2G DNA polymerase the choice No. 1 for isothermal amplification reactions such as loop-mediated isothermal amplification (LAMP), strand displacement amplification (SDA) and rolling circle amplification (RCA), ramification amplification (RAM), genome amplification and more.

Safety

This product does not require a Material Safety Data Sheet because it does neither contain more than 1% of a component classified as dangerous or hazardous nor more than 0.1% of a component classified as carcinogenic. However, we generally recommend the use of gloves, lab coats and eye protection when working with these or any other chemical reagents. myPOLS Biotec takes no liability for damage resulting from handling or contact with this product. Further information can be found in the REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL.

Legal information

Certain isothermal amplification methods may be patent protected. The purchase of this product does not convey to the purchaser a legal right to use the purchased product to perform any isothermal amplification methods for any commercial purposes.

Quality Control

DNA polymerase activity: Isotherm activity has been monitored and adjusted to a specific DNA polymerase activity using an artificial DNA template and DNA primer.

Enzyme-concentration has been determined by protein-specific staining. Please inquire more information at info@mypols.de for the lot-specific concentration.

Product source: recombinant protein expression in E.coli.

Experimental recommendation

Isothermal reaction mix

Component concentration	Volume	Final
Primer mix	various μl	various
dNTPs (10mM)	1 μl	400 μM
10x Isotherm buffer	2.5 μl	1x
Isotherm2G DNA polymerase (8 U/μl)	1 μl	8 U /reaction
Template/Sample extract	various μl	various
Nuclease-free water	up to 25 μl total reaction volume	

Keep all components on ice.

Spin down and mix all solutions carefully before use.

Primer mixes and concentration depends strongly on the employed isothermal reaction method.

Isotherm2G and Isotherm2G reaction buffer does not include a fluorescent dye. For for real-time measurements please add an appropriate amount of a suitable dye.

