VERSION 2

APR 09, 2023

OPEN ACCESS

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MANUSCRIPT CITATION: Bhadra, Sanchita, et al. "Preparation and Use of Cellular Reagents: A Low-resource Molecular Biology Reagent Platform."*Current Protocols*2.3 (2022): e387.

Bhadra, Sanchita, et al. "Producing molecular biology reagents without purification."*PLoS One*16.6 (2021): e0252507.

Protocol status: Working
We use this collection and it's working

Created: Nov 04, 2022

OpenVent Eco DNA Polymerase Production V.2

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Beneficial Bio | Low-cost, high-quality ...

Jenny Molloy

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COLLECTION integer ID: 72293

Keywords: PCR, Reagent Manufacturing

ABSTRACT

This collection contains the protocols for production, quality control, packaging and use of Beneficial Bio's dehydrated OpenVent DNA Polymerase.

Format: 32 tubes (4x8-tube PCR strips) 20ul of Enzyme each

OpenVent DNA polymerase is an extremely high thermostable and high fidelity enzyme suitable for routine PCR applications and amplification of GC-rich or looped sequences. The enzyme is compatible with a wide range of templates and its robustness guarantees reliable amplification results in almost all PCR applications. The Eco and room temperature stable format - PCR reaction tube strips containing the dehydrated enzyme (10 reactions per tube), offers affordability and flexibility.

FEATURES

- Dehydrated formulation enables better stability at room temperature
- Ideal for a wide range of applications including GC-rich or looped sequences amplification
- Amplification of low copy DNA targets
- Eco formulation and flexible format

DOCUMENTS

Product Manual
Product Specification Sheet (PSS)
Certificate of Analysis (CoA)

PROTOCOL GUIDANCE

Select one of the following options for enzyme production based on your lab infrastructure:

- IPTG-based induction requires a shaking incubator, large benchtop centrifuge and IPTG
- Plate-based autoinduction requires none of the above

After producing the enzymes, perform the three QC protocols in any order:

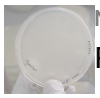
- SDS-PAGE to determine expression has been successful
- Functionality testing in PCR
- Nuclease contamination testing

IMAGE ATTRIBUTION

Beneficial Bio Ltd

FILES

Protocol



NAME

Plate Protein Expression on Autoinduction media

VERSION 3

CREATED BY

Stephane Fadanka

OPEN →

Protocol

NAME

Production of cellular reagents using IPTG

VERSION 1

CREATED BY

Nadine Mowoh

OPEN →

Protocol

NAME

Functionality test (OpenVent polymerase, PCR Master Mixes)

VERSION 2

CREATED BY

Nadine Mowoh

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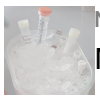
Protocol



NAME

Nuclease Test (OpenVent polymerase, PCR Master Mix, DNA loading dye)

VERSION 1

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Protocol

NAME

Assessing protein purity using SDS PAGE

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