

G2 DNA/RNA Enhancer

Freeze dried in 1.4 mm beads



Cat. No.: A421400

A421400

-	Size	G2 DNA/RNA Enhancer 1.4 mm beads
ID No.	-	4101400
Cap colour	-	Blue
A421400	100 tubes	100 x 2 ml tubes

Key Features

- Inhibition of DNA and RNA sorption to clay particles.
- Increased microbial DNA and RNA yield from clay – at least 2-10 fold.

G2 DNA/RNA Enhancer is convenient to use, when optimal DNA and or RNA extraction yield is required from especially clay. The primary function of G2 DNA/RNA Enhancer is to relieve inhibitory DNA-clay particle formations. G2 DNA/RNA Enhancer should be used in combination with either standardized extraction methods or commercial kits intended for DNA & RNA extraction from soil and clay.

Kit Components

Ampliqon G2 DNA/RNA Enhancer

Freeze dried G2 DNA/RNA Enhancer and 1.4 mm beads in a 2 ml tube.

Recommended Storage and Stability

Storage at -20 to 25 °C. Keep dry.

Quality Control

G2 DNA/RNA Enhancer is tested for contaminating activities, with no trace of endonuclease activity, nicking activity, exonuclease activity or RNase activity. Furthermore, G2 DNA/RNA Enhancer is functionally tested with regard to DNA extraction in a difficult-to-extract matrix.

Protocol

This protocol serves as a guideline for DNA and RNA extraction when using G2 DNA/RNA Enhancer. The G2 DNA/RNA Enhancer must be applied with an extraction kit.

Procedure:

- Add 0.25 grams of soil sample to the G2 DNA/RNA Enhancer tube.
- Apply your DNA or RNA isolation kit. E.g. MOBIO PowerSoil® DNA Isolation Kit or PowerLyzer™ PowerSoil® DNA Isolation Kit.

- If the bead-beating tube of the kit contains a lysis buffer, transfer this lysis buffer to the G2 tube and discard the now empty bead-beating tube of the kit
- If the kit offers separate bead-beating tube and lysis buffer, add lysis buffer to the G2 tube and discard the bead-beating tube of the kit

- Gently vortex.
- Proceed by following the manufacturer's kit instructions, using the G2 tube instead of the bead beating tube of the isolation kit, in order to obtain optimal results.

Related Products

Taq Polymerase (500 units) *	Cat. No.
Taq DNA Polymerase 5 U/μl	A110003
• with 10x Ammonium Buffer	A111103
• 5x PCR Buffer RED	A111803
Taq DNA Polymerase 5 U/μl, RED	A200003
• with 10x Ammonium Buffer	A201103
Taq DNA Polymerase 5 U/μl, glycerol free	A100003
• with 10x Ammonium Buffer	A101103

Hot Start Polymerase (500 units) *	Cat. No.
TEMPase Hot Start DNA Polymerase, 5 U/μl	A220003
• with 10x Ammonium Buffer	A221103
• 5x PCR Buffer RED	A221803
TEMPase Hot Start DNA Polymerase, glycerol free 5 U/μl	A240003
• with 10x Ammonium Buffer	A241103

High Fidelity - Proof reading (500 units) **	Cat. No.
AccuPOL DNA Polymerase 2.5 U/μl	A210003
• with 10x Ammonium Buffer	A211103

*Available in kits including one or two buffers (Ammonium Buffer, Standard Buffer or Combination Buffer). **AccuPOL only available in kits with Ammonium Buffer. All kits include extra 25 mM MgCl₂.

Buffers for DNA polymerases *	Cat. No.
10x Ammonium Buffer, 3 x 1.5 ml	A301103
10x Standard Buffer, 3 x 1.5 ml	A302103
10x Combination Buffer, 3 x 1.5 ml	A303103
5x PCR Buffer RED, 6 x 1,5 ml **	A301810

*Ammonium Buffer, Standard Buffer and Combination Buffer are also available as Mg²⁺ free buffers, detergent free buffers and Mg²⁺ and detergent free buffers. **For direct gel loading and visualisation.

Taq Master Mixes (500 x 50 μl reactions) *	Cat. No.
2x Master Mix, 1.5 mM MgCl ₂ final concentration	A140303
2x Master Mix RED, 1.5 mM MgCl ₂ final concentration	A180303

TEMPase Hot Start Master Mixes (500 x 50 μl reactions) *	Cat. No.
2x Master Mix A**, 1.5 mM MgCl ₂ final concentration	A230303
2x Master Mix A**BLUE, 1.5 mM MgCl ₂ final concentration	A290403

*Master mixes available also in 1.1x variants as well as 2 mM MgCl₂ variants, **Mix A is Ammonium Buffer based, also available as Mix C based on Combination Buffer.

Special Master Mixes (500 x 50 μl reactions)	Cat. No.
Multiplex 2x Master Mix, 3 mM MgCl ₂ final concentration	A260303
GC TEMPase 2x Master Mix I – for GC-rich templates	A331703
GC TEMPase 2x Master Mix II – for GC-rich templates	A332703

Real-time PCR Master Mixes (400 x 25 µl reactions)	Cat. No.
RealQ Plus 2x Master Mix for probe, <ul style="list-style-type: none"> • without ROX™ • with low ROX™ • with high ROX™ 	A313402 A314402 A315402
RealQ Plus 2x Master Mix Green <ul style="list-style-type: none"> • without ROX™ • with low ROX™ • with high ROX™ 	A323402 A324402 A325402

Ultrapure dNTPs*	Cat. No.
dNTP Mix 40 mM (2 x 500 µl): 10 mM each dA, dC, dG, dT	A502004
dNTP Set, 100 mM each: 250 µl of each dA, dC, dG and dT	A511104

*Other concentrations and Single dNTPs are available.

Loading Buffers and Ladders	Cat. No.
5x Loading Buffer Red *, 5 x 1 ml	A608104
PCR DNA Ladder **, 100 – 3000 bp, 1 x 0.5 ml	A610341

* Also available with Blue, Orange or Cyan. ** Available in different size ranges.

Reagents for *in vitro* laboratory use only.

Other product sizes, combinations and customized solutions are available. Please look at www.ampliqon.com or ask for our complete product list for PCR Enzymes. For customized solutions please contact us.

Made in Denmark
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