

GIBCOBRLLIFE  TECHNOLOGIES™**SEQUENCER_x Enhancer
Solution G****Cat. No. 12245-015**
reactions**Size: 2 x 100****Store at -20°C**Description:

SEQUENCER_x Enhancer Solution G is a novel reaction co-solvent (patent pending) which facilitate sequencing through problematic GC-rich regions, direct repeats, inverted repeats, and/or hairpins. The component is added to the reaction mixture, and the mixture is incubated in a thermocycler as usual. Early terminations and/or low signal strength are typically improved within the troublesome region, permitting additional sequence data to be obtained. SEQUENCER_x Enhancer Solution G is fully compatible with BigDye terminator, dRhodamine dye terminator and rhodamine dye terminator chemistries and all sequencing platforms. Sufficient reagents are supplied based on a final 1X reaction volume of 20 µl.

<u>Component</u>	<u>Amount</u>
4X SEQUENCER _x Solution G	2 x 500 µl

Quality Control:

SEQUENCER_x Enhancer Solution G is evaluated with a template containing direct repeats in a fluorescent sequencing assay using dRhodamine dye terminator chemistry.

Doc. Rev. 102700

This product is distributed for laboratory research use only. CAUTION: Not for diagnostic use. The safety and efficacy of this product in diagnostic or other clinical uses has not been established.

For technical questions about this product, call the Life Technologies TECH-LINE™ (800) 828-6686.

General Recommendations and Guidelines:

- Calculate the amount of Enhancer required based on sequencing reaction volume. The recommended final concentration in a sequencing reaction is 1X. For example, to a 20- μ l BigDye Terminator reaction, add 5 μ l of 4X SEQUENCER_x Enhancer Solution G. However, the optimal effective concentration may vary depending on the exact nature of the difficult region within the DNA template. A final concentration of 0.5X to 1X can be used.
- In place of an equal volume of the water addition, add the appropriate volume of Enhancer to either a master mix or an individual sequencing reaction. Mix well after Enhancer addition.
- There is no need to make any other changes to the composition of a standard sequencing reaction or to the thermocycling conditions.
- Resolution of problem templates may be negatively impacted if sequencing reactions are scaled down below 0.25X to 0.5X.
- For optimal results, do not combine more than one SEQUENCER_x Enhancer Solution in a single sequencing reaction.
- These reagents are not designed to solve sequencing problems associated with long (>30) poly A structures.

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