LIFESCT
Life Scientists' Service Center

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PhaseShield™ Gel, , Light

Cat. #: M2302 Size: 2 ml/15 ml

Introduction

PhaseShield™ Gel (PLG) is a proprietary tool for avoiding contamination of the protein layer when extracting DNA or RNA with organic reagents. PLG shortens the extraction operation time while increasing the nucleic acid yield. Under the action of centrifuge, PLG can form a dense stationary phase between the water phase and the organic phase, and the substances in the organic phase are effectively isolated below PLG. The formation of a dense solid-phase layer allows the experimenter to easily transfer nucleic acids from the aqueous phase into clean tubes.

When PLG is used in nucleic acid extraction experiment, the yield of nucleic acid can be increased by 10%-20%, which can effectively avoid the contact between experimenters and toxic substances, and there is no need to worry about whether the sample will be contaminated when extracting. PLG can be applied to the experimental operation of liquid phase extraction with any organic reagent (phenol or chloroform).

Package Information

Components	M2302-05	M2302-15	M2302-20
PhaseShield™ Gel, Heavy	50× 2ml	100× 15ml	200× 2ml

Storage

Store at room temperature and cannot be frozen at low temperature.

Applications

1. Recovery of DNA from agarose gel electrophoresis.
2. Isolation and purification of Lambda DNA.
3. Genomic DNA extraction from whole blood.
4. Extraction of DNA from cells in tissue culture.
5. Extraction of genomic DNA from the mouse tail.

Protocol

1. Before use, put PLG in a centrifuge and centrifuge for 20-30 seconds at 12,000-16,000× g.
2. Add 100-750 µl (PLG 2 ml) liquid sample and the same volume of organic extraction reagent to PLG.
3. Thoroughly mix the organic and aqueous phases to form a mixed phase solution.

Note: No vortex mixing.

4. Centrifuge the mixed solution at 12,000-16,000× g for 5 minutes, so that it can be separated. PLG will form a dense solid layer between the organic phase and the water phase. A small amount of PLG may remain at the bottom of the centrifuge tube, which will not affect the effect. If secondary extraction is needed, the mixed solution can be added to the tube (the upper layer of the layered PLG) without exceeding the volume limit of the centrifuge tube.
5. Pour it directly or pipette to carefully transfer the upper PLG aqueous phase containing nucleic acid to another clean centrifuge tube.
6. Add salt solution or alcohol to the transferred aqueous phase to precipitate nucleic acid (nucleic acid precipitation aid can also be added if necessary), and carry out subsequent routine experimental operations.