

Phase Lock Gel (PLG)

Isolation of genomic DNA from paraffin-embedded sections

Note: Please read the *Phase Lock Gel Manual* before starting.

Equipment and reagents to be supplied by user

- Xylene
- 80% ethanol, 20% xylene solution
- 1 M sodium thiocyanate solution (NaSCN)
- Proteinase K (10 mg/ml) (Cat. No. 25000150)
- DNA isolation buffer (5 M NaCl, 0.5 M EDTA at pH 8.0, 0.5% Tween 20, double-distilled H₂O)
- Phenol
- Phenol:chloroform:isoamyl alcohol (25:24:1)
- 3 M sodium acetate
- 100% ethanol
- TE buffer (10 mM Tris-HCl and 1 mM EDTA at pH 8.0)
- Phase Lock Gel Heavy tubes (100 x 15 ml) (Ref. No. 2302850)

Procedure

1. Deparaffinize the sections with two successive washes of xylene.
2. Hydrate using 80% ethanol, 20% xylene solution and vacuum-dry.
3. Incubate the samples overnight in 1 M sodium thiocyanate for protein denaturation.
4. Digest the proteins with proteinase K in the DNA isolation buffer at 37°C in a shaking water bath overnight.
5. Extract the mixture with equal volumes of phenol and phenol:chloroform:isoamyl alcohol (25:24:1) in pre-spun 15 ml Phase Lock Gel tubes.
6. Precipitate the DNA with 3 M sodium acetate in 100% ethanol at -20°C overnight.
7. Pellet the DNA, air-dry, and resuspend in TE buffer.

Ordering Information

Ref. No.	Product Name	Quantity	Sample Volume	Tube Color
2302810	Phase Lock Gel Heavy 1.5 ml – 200 Tubes	200	100 – 500 µl	green
2302830	Phase Lock Gel Heavy 2 ml – 200 Tubes	200	100 – 750 µl	yellow
2302850	Phase Lock Gel Heavy 15 ml – 100 Tubes	100	1 – 6 ml	† clear
2302870	Phase Lock Gel Heavy 50 ml – 25 Tubes	25	5 – 20 ml	† clear

† PLG Heavy is opaque while PLG Light is translucent.

Phase Lock Gel tubes are also available in different sizes and formulations for handling of different sample volumes and using different organic extraction solvents.

[Please find all our Phase Lock Gel products on our website.](#)