Alkaline Lysis Solutions (For Mini-Preparation of Plasmid DNA)

Catalog Number **ML 021-01 (Alkaline Lysis solution I)**
ML 021-02 (Alkaline Lysis solution II)
ML 021-03 (Alkaline Lysis solution III)
Storage Temperature 15~30°C

Product Description
Alkaline lysis solution I, II, and III are solutions that extract small quantities of plasmid DNA from *E. coli.* Solution I destroys cell walls and is more effective when used together with lysozyme. Store at 2~8°C for long storage. Solution II breaks down cell membrane and deactivates protein contained in cells, basifying the cell suspension solution and separating one strand chromosomal cell DNA during the process. Before use, warm up to 37°C for 20 min. After use, close the cap tightly for preventing oxidation. Solution III neutralizes basic cell suspension solution while precipitating single strand chromosomal DNA with large quantities of potassium. The suspension solution is removed of protein through phenol extraction, after which plasmid DNA is enriched and purified through alcohol precipitation.

Storage/Stability
Alkaline lysis solutions should be stored at 15~30°C. Deterioration of the liquid may be recognized by (1) precipitate or particulate matter throughout the solution, (2) cloudy appearance, (3) color change, and/or (4) pH change. Product label bears expiration date.

Precautions
For *In Vitro* Use Only

Components

ML 021-01	ML 021-02	ML 021-03
50 mM Glucose	0.2 N NaOH	3 M Potassium
25 mM Tris-Cl (pH 8.0)	1% (w/v) SDS	5 M Acetate
10 mMDTA (pH 8.0)		

Product Profile	
Appearance	Clear colorless solution
DNase, RNase, and Proteinase	None Detected
Sterility	Sterilized by 0.2 μm filtration system. Sterility tests are performed in accordance with protocols described in USP.

References
Sambrook, J., et al., Molecular Cloning; A Laboratory Manual. Cold Spring Harbor Laboratory Press. 3rd ed., p. 1.31. 2001. NY. USA.