Agarose Gel Electrophoresis

Jiaxin Li[1]

[1]South China University of Technology

Oct 18, 2020

1 Works for me dx.doi.org/10.17504/protocols.io.bhvpj65n

Jiaxin Li

DOI

dx.doi.org/10.17504/protocols.io.bhvpj65n

PROTOCOL CITATION

Jiaxin Li 2020. Agarose Gel Electrophoresis. **protocols.io** https://dx.doi.org/10.17504/protocols.io.bhvpj65n

CREATED

Jun 24, 2020

LAST MODIFIED

Oct 18, 2020

PROTOCOL INTEGER ID

38543

Mix

1 Preparation of TAE

Preparation method:
1. Concentration: 50x to 1x
2. Preparation:
A) 100ml 50x mother liquor to beaker, Gatrochen water to 500ml
B) Open a new tank of 4.5L Watson's water, pour the above liquid into 5L liquid

2 Prepare 1% agarose (Commonly used for 200 bp-5 Kb of DNA) :

agarose/g	TAE/ml	dyestuff/ul	hole count
0.8	80	2	50
0.4	40	1	25
0.2	20	0.5	11

Process

3 Melt agarose in 1X TAE buffer in microwave oven until the liquid is fully transparent.

4 Add EB (Ethidium bromide) in the melted agarose.

5 Pour the melted agarose in the gel cast with the comb set.

6 Wait 25 minutes until the gel solidifies.

7 Cover the gel with 1X TAE buffer and remove the combs carefully.

8 Load the samples in the wells:
3 µl of 1 kb DNA ladder
Mix 3 µl of DNA with 1 µl loading buffer

9 Run the gel at 120 volts for 25 minutes without letting the bands run out of the gel.

10 Remove the gel from the chamber.

11 Visualize the DNA fragments.

Citation: Jiaxin Li (10/18/2020). Agarose Gel Electrophoresis. https://dx.doi.org/10.17504/protocols.io.bhvpj65n