

Agarose

1 Contents

Components	HY-K1031-100 g
Agarose	100 g

2 Introduction

Agarose is widely used for nucleic acid isolation and identification. This product can be made into 0.5-2.5% agarose gel according to different needs and can resolve DNA and RNA fragments from 50-15,000 bp.

3 Features

Gel Strength (1% gel)	> 1,200 g/cm ²
Electroosmosis (EEO)	< 0.15
Sulfide	≤ 0.15%
Gel Point (1.5% gel)	35-37°C
Melting Point (1.5% gel)	87-89°C
Water concentration	≤ 10%
Nuclease	None

4 General Protocol

1. Choose appropriate agarose concentration according to the size of nucleic acid fragment and the type of electrophoresis buffer.

Agarose Concentration	Linear DNA resolution range (bp)	
	1× TAE	1× TBE
0.6%	1,200-15,000	1,200-12,000
0.8%	1,000-10,000	1,000-12,000
1.0%	200-10,000	100-10,000
1.2%	100-8,000	100-5,000
1.5%	100-5,000	50-3,000
2.0%	50-3,000	50-3,000
2.5%	50-3,000	50-2,000

2. Prepare the gel

- Add appropriate agarose into the cleaned conical flask and dissolve with appropriate electrophoresis buffer (TAE or TBE). Seal the flask and heat in the microwave until the agarose is completely dissolved.
- Add Nucleic Acid dye (HY-K1004 MCE SYBR Green I Nucleic Acid Gel Stain).
- Mix gently and pour the agarose solution into the rubber board and insert the comb in place. The thickness of the gel is generally 3-5 mm.
- Cool at room temperature for 30-60 minutes for subsequent electrophoresis.

5 Storage

Store at room temperature for 3 years

6 Precautions

- Ensure that the agarose is completely dissolved.
- Pay attention to prevent burns during heating.
- Place the gel in TAE or TBE buffer if not used immediately.
- The gel buffer and electrophoresis buffer must be consistent.
- This product is for R&D use only, not for drug, household, or other uses.
- For your safety and health, please wear a lab coat and disposable gloves to operate.