

66602

Agarose Gel Electrophoresis Kit (Teaching)

Part E

Specifications

Gel strength

Electrophoresis test

Visualization of bands after staining

Preparation of 0.8% (w/v) agarose gel in 1X TAE buffer, should Polymerize in 5-10 minutes

Electrophoresis of DNA samples in 0.8%(w/v)agarose gel at 100 V should resolve individual clear bands Clear definite bands of plasmid & genomic DNA seen

Other Information

Description

The overall goal is to view different plasmid DNAs by their movement through a matrix viz. Agarose gel. Electrophoresis through Agarose or Polyacrylamide gels is the standard method used to separate, identify and purify DNA fragments. DNA, a negatively charged molecule, moves to the positive electrode (anode) in a charged field. This is a simple, rapid technique and gives good resolution of the DNA. The location of DNA in the gel can be determined by directly staining the gel with Ethidium Bromide (a fluorescent intercalating dye) and visualizing under UV light. Agarose gels, though having a lower resolving power than Polyacrylamide gels, have a greater range of separation. Agarose is a polysaccharide that forms gels with pores ranging from 100 nm to 300 nm in diameter, the size depending on the concentration of Agarose in the gel. DNA from 200 bp to 50 kb in length can be separated on Agarose gels of various concentrations. The mobility and separation of DNA molecules also depends upon their shape or conformation. Therefore, the different forms of the plasmid DNA (i.e. supercoiled, nicked circular and linear) of the same molecular weight also migrate through the Agarose gel at different rates. Plasmid DNA (250 ng/10mcl) -180 mcl Genomic DNA (100 ng/10mcl) -180 mcl 6X Gel Loading Dye -100 mcl Agarose Powder - 1.8 gm Ethidium Bromide - 40 mcl 50X TAE Stock Buffer -25 ml Lambda HindIII Marker -150 mcl

Includes

General Information

Storage	Includes components ranging from RT to -20°C
Shelf Life	12 Months
IMDG Identification	Not Regulated for Transport (Non-Haz)
HSN Code	
15 expt. Kit	38229090 (GST 12%)

Available Packages

15 expt. Kit