

46037

Southern Blotting Kit (Teaching)

Part E

Specifications

Evaluation

Other Information

Description

Includes

DNA bands seen on Nitrocellulose membrane after blotting

Although agarose and polyacrylamide gels are well suited for electrophoretic separations of macromolecules, subsequent functional probing of these macromolecules is rendered difficult due to various reasons including their reduced accessibility on account of being trapped in a semi-solid matrix. It has now become commonplace to transfer both protein and nucleic acid molecules separated in either agarose or polyacrylamide gels to nitrocellulose or nylon membranes that are more amenable to functional analyses (e.g., hybridization of DNA to complementary sequences as a means of ascertaining the identity of the band in the gel). E. M. Southern invented a technique to transfer separated DNA molecules to a membrane, which is capable of binding the DNA, and immobilizing it for further analysis. The technique named as Southern blotting, after its inventor, involves placing either a nitrocellulose or nylon membrane in contact with the agarose gel and facilitating the transfer process by capillary action. By drawing buffer from the gel to the membrane, the DNA fragments are forced to move with the buffer and deposit on the membrane.

Nitrocellulose or nylon membranes have innate ability to bind DNA and proteins by hydrophobic and hydrogen bonding interactions.

These multipoint interactions are stable to a variety of physical and chemical manipulations making the blot useful for many analysis.

Nitro cellulose Membranes - 5 (pieces)

20 X SSPE - 250 ml

Agarose - 1 g

Ethidium bromide - 30 mcl

50 X TAE - 25 ml

DNA Samples - 4

Filter paper wicks - 5 (pieces) Filter paper strips - 20(pieces)

Tissue roll - 1

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	
5 expt. Kit	38229090 (GST 12%)

Available Packages

5 expt. Kit