

PRODUCT SPECIFICATIONS

Product HYBEXTM Hybridization Solution

Catalog MB-1230

Amount 200 ml

Lot No. <u>V0430</u>

Storage

HYBEX[™] Hybridization Solution is stable for three months at room temperature. For prolonged storage, the solution can be stored at 4 °C for one year. Before use, warm the solution in a 37 °C water bath. If any precipitation occurs during storage, incubate at 37 °C and mix well to dissolve.

Usage Information:

HYBEX[™] Hybridization Solution is a ready-to-use hybridization formula for general hybridization of nucleic acid probes in membrane-based assays. HYBEX[™] Hybridization solution does not contain formamide.

Prehybridization and hybridization incubations can be carried out in appropriate hybridization tubes or in heat-sealable polyethylene bags. To ensure constant agitation, incubations can be performed in a commercial hybridization oven or water bath equipped with a shaking platform. Prehybridization: Preincubate the membrane in sufficient HYBEX[™] Hybridization Solution to ensusre that the membrane is completely covered (usually 0.2 ml of hybridization solution is enough for each square centimeter of membrane). Nitrocellulose membranes are prehybridized for 1-2 hours and nylon membranes for 30 minutes. Prehybridization temperature should be the same as the temperature used for hybridiation.

Hybridiation: Double stranded DNA probes need to be denatured before hybridizaiton. Dilute the probe in HYBEX[™] solution. Use sufficient hybridization solution to ensure that the membrane will be completely covered. Decant prehybridization solution and immediately add diluted probe to the membrane. Optimal hybridization temperature will depend on the probe type and size and may have to be empirically determined. As a guideline, temperatures can range from 68 °C for large DNA fragments to room temperature for short oligonucleotide probes*. Incubate the membrane with the HYBEX[™] solution containing the probe for two hours to overnight. Following hybridization, wash the membrane with stringency solutions and detect the probe.

*For oligonucleotide probes it is necessary to determine the melting temperature of the oligo.

For additional information about labeling and detection please visit ou website.