

GEAhyb Hybridization Solution

Catalog Number

H-01

Contents

Hybridization Solution for Twelve (12) GEAArray[®] microarrays

Description

GEAhyb Hybridization Solution is an optimized hybridization buffer prepared for use with all Oligo GEAArrays[®] and cDNA GEAArrays[®]. The GEAhyb Hybridization Solution is especially suited to our nylon-based microarray technology. GEAhyb Hybridization Solution is used to hybridize labeled DNA or RNA in microarray and dot-blot experiments. For the cDNA Q and S Series GEAArrays, it is also used with sheared salmon sperm DNA (available separately as catalog number GA-007) in the preparation of GEAprehyb blocking solution. The GEAhyb Hybridization Solution provides enough material to process 12 GEAArray membranes. Instructions for the use of GEAhyb Hybridization Solution are included in your GEAArray User Manual. A brief protocol for experienced array users is also provided below.

Materials Included

Please check the kit components immediately after you receive this package. SuperArray is not responsible for any missing items not reported within two (2) business days upon receipt.

GEAhyb Hybridization Solution, one (1) Bottle

Component	Volume
GEAhyb Hybridization Solution	50 ml

NOTE: Some components of the solution will precipitate at lower temperatures. This will not affect performance of the hybridization solution providing that all buffer components are completely dissolved before you use the solution. To ensure complete dissolution of buffer components take special care in following the GEAArray User Manual instructions (involves pre-warming the solution to 60 °C).

Storage Conditions

The GEAhyb Hybridization Solution is shipped at ambient temperature. For long-term storage, keep entire kit at 4 °C

Shelf Life: All reagents are stable for 6 months after receipt of the kit if stored at the recommended temperature.

Related Products

Oligo GEAArray[®] Microarrays (See www.superarray.com/ArrayList.php for complete listings)
ArrayGrade[™] cRNA Cleanup Kit (GA-012) Oligo GEAArray[®] Starter Kit (GA-029)
ArrayGrade[™] Total RNA Isolation Kit (GA-013) Oligo GEAArray[®] Reagent Kit (GA-034)

Brief Protocol

First-time users should see the appropriate Oligo GEMArray or cDNA GEMArray User Manual for a more detailed Protocol. Researchers using the GEMArray Express protocol with Oligo GEMArrays in HybPlate Format should refer to the Oligo GEMArray User's Manual.

Pre-Hybridization

1. Pre-wet the array membrane with 5 ml deionized water for 5 min in the provided hybridization tube. Screw on the cap hand-tight and allow tube to sit inverted while preparing the GEMAprehyb solution.
2. Warm the GEMAhyb Hybridization Solution to 60 °C and invert the bottle several times to allow complete dissolution of the buffer components.
3. For cDNA GEMArrays only, heat sheared salmon sperm DNA at 100°C for 5 min. Chill on ice immediately. **Prepare GEMAprehyb:** Add the heat-denatured salmon sperm DNA to the pre-warmed GEMAhyb Hybridization Solution to a 100 µg/ml final concentration. You will need 3 ml of GEMAprehyb for each array. Keep the GEMAprehyb solution at 60 °C until needed.
4. For Oligo GEMArrays only, use 2 ml pre-warmed (60 °C) GEMAhyb Hybridization Solution directly as the pre-hybridization (GEMAprehyb) solution instead.
5. Discard the deionized water from the hybridization tube. Add 2 ml of the appropriate GEMAprehyb solution, and vortex the tube gently for a few seconds. Be sure the cap of the tube is screwed on hand-tight.
6. Place the tube inside your hybridization cylinder.
7. Pre-hybridize in a hybridization oven at 60 °C for 1 to 2 hours with continuous agitation at 5 to 10 rpm.

Hybridization:

1. **Prepare GEMAhyb:** Add target or probe (labeled cDNA or cRNA for cDNA for Oligo GEMArray, respectively) to 0.75 ml of pre-warmed GEMAprehyb for the cDNA GEMArray or 0.75 ml of pre-warmed GEMAhyb Hybridization Solution for the Oligo GEMArray. Mix well, and keep the GEMAhyb at 60°C.
2. Discard the GEMAprehyb from the hybridization tube.
3. Add the GEMAhyb with probe/target to the hybridization tube.
4. Hybridize overnight at 60 °C with continuous agitation at 5 to 10 rpm.
5. Continue to the wash and detection steps of the microarray experiment.