

Technical Note



Anthraquinone chemistry

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Immobilization of Immobilizer™ reagent on native polymer slides

Preface:

This protocol describes how to couple Exiqon's proprietary Immobilizer™ reagent to native polymer slide for use in research experiments. The protocol is developed for hand coupling and not for coupling of large quantities of polymer slides. Thus, the intention is to provide the user with a starting point for immobilization of the AQ Immobilizer™ reagent to any surface but particular polymeric slides.

Materials and reagents:

1. Stock solution of AQ Immobilizer™ reagent (conc. 2g/L)
2. Ultra-pure water (MilliQ water)
3. Stratalinker irradiation box (Stratagene)
4. 50mL plastic tubes
5. Metal tray
6. Slide holder and jar for slide washing

Procedure:

The AQ Immobilizer™ reagent is coupled in such a way that the slides are submerged in the diluted AQ Immobilizer™ reagent (liquid level above slide should be 1mm in order to obtain a homogenous coating).

1. Dilute the AQ Immobilizer™ reagent to 1600µg/L in ultra-pure water. Mix the reagent carefully before applying.
2. Place the slides in a metal tray (remember to place the slides so that the logo is readable). In order to prevent the slide from floating use screws to hold them to the bottom of the tray.
3. Place the diluted Immobilizer™ reagent to the tray (make sure that the slides are totally covered by the reagent and that no air bubbles are observed on the front of the slides. The liquid level above the slides should be 1mm).
4. Place the metal tray in the irradiation box and irradiate the slides with a total energy of 2300 micro joule at 254 nm (it may be advisable to optimize the irradiation time. A good starting point will be 5 min of irradiation).
5. After irradiation transfer the slides to a slide holder and wash the slides in a jar containing ultra-pure water for 5 min.
6. Dry the slide by using a centrifuge with a microtiter plate carrier or use a heat cabinet at +37°C for 30 min.

7. The slides are then ready for use. For storage after irradiation place the slides in a slidebox.

Trademarks and patents

The anthraquinone technology is covered by U.S. Patent no. 6,033,784, EP 0820483 (Nationally filed in Albania, Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Monaco, Netherlands, Portugal, Slovenia, Spain, Sweden, Switzerland and United Kingdom), JP 3124037 and AU 699321 owned by Exiqon A/S.

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