

# Aqua DePar, 10X

## Ancillary Reagent

Control Number: 901-ADP1002-082817

**Catalog Number:** ADP1002 M

**Description:** 500 ml; concentrated

**Intended Use:**

For In Vitro Diagnostic Use

**Summary & Explanation:**

Aqua DePar is a water-soluble deparaffinization reagent which can be used for immunohistochemistry, H&E's and special stains. Aqua DePar is non-flammable and safe to use. Paraffin is completely broken down and dissolved by Aqua DePar. This product eliminates the use of xylenes, xylene substitutes and alcohols, thus saving money and reducing toxic waste, hazardous and flammable materials, and exposure to child-bearing women.

Hundreds of tissues and several different kinds of paraffin were tested for H&E's, special stains and immunohistochemistry. A direct comparison was made with traditional xylene methods. No differences with Aqua DePar were noted between the two methods, except nuclear detail was more crisp and sharp with H&E staining with Aqua DePar compared to the traditional xylene method.

**Known Applications:**

Immunohistochemistry (formalin-fixed paraffin-embedded tissues)

**Supplied As:**

**500ml**

Aqua DePar, 10X concentrate (ADP1002M)

**Materials and Reagents Needed But Not Provided:**

- Microscope slides, positively charged
- Desert Chamber\* (Drying oven)
- Positive and negative tissue controls
- Xylene (Could be replaced with a xylene substitute\*)
- Ethanol or reagent alcohol
- Decloaking Chamber\* (Pressure cooker)
- Deionized or distilled water
- Wash buffer\*(TBS/PBS)
- Pretreatment Reagents\*
- Enzyme digestion\*
- Avidin-Biotin Blocking Kit\* (Labeled Streptavidin Kits Only)
- Peroxidase block\*
- Protein block\*
- Primary antibody\*
- Negative control reagents\*
- Detection kits\*
- Detection components\*
- Chromogens\*
- Hematoxylin\*
- Bluing reagent\*
- Mounting media\*

\* Biocare Medical Products: Refer to a Biocare Medical catalog for further information regarding catalog numbers and ordering information. Certain reagents listed above are based on specific application and detection system used.

**Storage and Stability:**

Store at room temperature. Do not use after expiration date printed on vial. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user. Diluted reagents should be used promptly; any remaining reagent should be stored at room temperature.

**Protocol Recommendations**

**Deparaffinizing Tissues:**

1. Dilute concentrated Aqua DePar at a ratio of 1:10 (1 ml Aqua DePar to 9 ml of deionized water).
2. Deparaffinize tissue sections in 1 change of 1X Aqua DePar for 5-10 minutes at 65-75°C.
3. Dilute concentrated Hot Rinse at a ratio of 1:25 (1 ml Hot Rinse to 24 ml of deionized water).
4. Transfer tissue into 1 or 2 changes of Biocare's 1X Hot Rinse for 1 minute at 60°C.
5. Wash in tap water and rinse in deionized water.

**Two-step Deparaffinization and Heat Retrieval Method:**

1. Dry tissue sections for 1 hour at 37°C and then dry slides for 10-30 minutes at 60°C.
2. Dilute concentrated Aqua DePar at a ratio of 1:10 (1 ml Aqua DePar to 9 ml of deionized water).
3. Fill a Coplin Jar, Tissue-Tek™ staining dish or metal slide canister with 1X Aqua DePar.

4. Fill a second container with 1X of Biocare's Reveal, Borg or Universal Decloaker HIER solution.
5. Place both solutions in the Decloaking Chamber.
6. Preheat the solutions for 10 minutes at 65-75°C (DC2002/2008) or 80°C (DC NxGen).
7. Place the slides in the preheated Aqua DePar and agitate 10 dips. Let slides sit in solution for 5-10 minutes.
8. Transfer slides into the second container with Reveal, Borg or Universal Decloaker HIER solution and agitate 10-20 dips. Remove the Aqua DePar solution from the Decloaking Chamber.
9. Retrieve sections under pressure using Biocare's Decloaking Chamber. Follow the recommendations on the antibody data sheet and Table 1 (below).
10. Check solution for appropriate color change (refer to appropriate HIER solution data sheet).
11. Gently rinse by gradually adding DI water to the solution, then remove slides and rinse with DI water.

**Technical Notes:**

1. A 60°C water bath, oven or Biocare's Decloaking Chamber can be used for deparaffinization.
2. Recommended temperatures are 60-65°C for H&E's and special stains and 65-80°C for immunohistochemistry.
3. If using Biocare's Desert Chamber Pro (a programmable turbo-action drying oven), dry sections at 25°C overnight or at 37°C for 30-60 minutes and then dry slides at 60°C for 30 minutes.
4. Use positive charged slides (use Biocare's Kling-On HIER Slides) and cut tissues at 4-5 microns. Do not use any adhesives in the water bath. Poor fixation and processing of tissues will cause tissue sections to fall off the slides, especially fatty tissues such as breast. Tissues should be fixed a minimum of 6-12 hours.

Table 1. Biocare Decloaking Chamber Protocol Equivalence

Protocol	DC2002/DC2008	DC NxGen
125°C/30 sec	125°C/30 sec	110°C/10 to 15 min
95°C/40 min	95°C/40 min	95°C/40 min
90°C/15 min	90°C/15 min	90°C/15 min
80°C/60 min	80°C/60 min	80°C/60 min
60°C/15 hrs	60°C/15 hrs	60°C/15 hrs

**Limitations:**

The protocols for a specific application can vary. These include, but are not limited to: fixation, heat-retrieval method, incubation times, tissue section thickness and detection kit used. Due to the superior sensitivity of these unique reagents, the recommended incubation times and titers listed are not applicable to other detection systems, as results may vary. The data sheet recommendations and protocols are based on exclusive use of Biocare products. Ultimately, it is the responsibility of the investigator to determine optimal conditions. These products are tools that can be used for interpretation of morphological findings in conjunction with other diagnostic tests and pertinent clinical data by a qualified pathologist.

**Quality Control:**

Refer to CLSI Quality Standards for Design and Implementation of Immunohistochemistry Assays; Approved Guideline-Second edition (I/LA28-A2). CLSI Wayne, PA, USA (www.clsi.org). 2011

**Precautions:**

This product is not classified as hazardous. The preservative used in this reagent is Proclin 300 and the concentration is less than 0.25%. Overexposure to Proclin 300 can cause skin and eye irritation and irritation to mucous membranes and upper respiratory tract. The concentration of Proclin 300 in this product does not meet the OSHA criteria for a hazardous substance. Wear disposable gloves when handling reagents. Specimens, before and after fixation, and all materials exposed to them should be handled as if capable of transmitting infection and disposed of with proper precautions. Never pipette reagents by mouth and avoid contacting the skin and mucous membranes with reagents and specimens. If reagents or specimens come in contact with sensitive areas, wash with copious amounts of water. Microbial contamination of reagents may result in an increase in nonspecific staining. Incubation times or temperatures other than those specified may give erroneous results. The user must validate any such change. The MSDS is available upon request and is located at <http://biocare.net/support/msds>. Consult OSHA, federal, state or local regulations for disposal of any toxic substances. Proclin™ is a trademark of Rohm and Haas Company, or of its subsidiaries or affiliates.

**Troubleshooting:**

Follow the reagent specific protocol recommendations according to data sheet provided. If atypical results occur, contact Biocare's Technical Support at 1-800-542-2002.