

StatLab Quantum HDx Wash Buffer for IHC/ ISH 20X

Catalog Number: QHD-015

Document #: IFU-278_QHD-015
Effective Date: 02/15/2018, Rev A

Intended Use

For In Vitro Diagnostic Use.

Product Description

Quantum HD wash buffer for IHC, ISH (20x) is for use as wash buffer for immunolabeling technique. It is employed to rinse reagents off slides and to provide a medium for short-term storage of immunohistochemistry specimens in between application of reagents. When diluted, the ready to use solution is a 50mM Tris Buffer solution with a pH range of 7.4 ± 0.1 . Wash buffers are used to rinse away reagents and also helps maintain morphological characteristics of the antibody and their respective epitopes, in order to facilitate the specific binding necessary in an immunohistochemical reaction. Tween®20 is added to promote effective washing and to prevent non-specific background staining. The wash buffer can also be used for in-situ hybridization techniques.

Known Applications

Immunohistochemistry (formalin-fixed paraffin-embedded tissues) and In-Situ Hybridization

Summary and Explanation

Optimal immunostaining not only depends the specificity of the primary antibody and other immunoreagents but also depends on obtaining a good signal to noise ratio. Binding of an antibody to its epitopes involves van der Waals forces, electrostatic forces and hydrophobic forces. Certain antibodies have a tendency to bind loosely and nonspecifically to unrelated epitopes, which can create undesired background staining. In order to remove these nonspecifically bound antibodies, a thorough washing is required after each immunostaining step. Immuno Wash buffer is specifically designed to remove such loosely bound antibodies effectively and efficiently and to provide a cleaner staining with less background.

Format

20x Concentrated

Volume/UOM

1000 mL

Storage and Handling

Store at room temperature. Do not use after expiration date printed on label. 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.

Protocol Recommendations

1. After each immunostaining step, wash slide(s) with 1x Immuno Wash Buffer three times.
2. Remove excess buffer from slide and proceed to the next immunostaining step.

Preparation of Working Solutions

1. Dilute one part 20X Quantum HD Immuno Wash Buffer with 19 parts deionized or distilled water
2. Shake well
3. Measure water and add buffer to wash to eliminate an overflow of bubbles.

Precautions

1. Wear disposable gloves when handling reagents.
2. 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.¹
3. 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.
4. Microbial contamination of reagents may result in an increase in nonspecific staining.
5. Incubation times or temperatures other than those specified may give erroneous results. The user must validate any such change.
6. Do not use reagent after the expiration date printed on the label.
7. The SDS is available upon request.
8. Consult OSHA, federal, state or local regulations for disposal of any toxic substances.

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

Troubleshooting

Contact StatLab Medical Products Technical Support at (800) 442-3573, option 5 or email ihctech@statlab.com to report unusual staining.

Warranty

There are no warranties, expressed or implied, which extend beyond this description. StatLab Medical Products is not liable for property damage, personal injury, or economic loss caused by this product.

Performance Characteristics

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 StatLab Medical 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.



Reference:

Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. MMWR Supplements 61(01):1-101, 2012

