

# AviBond OneStep HRP Polymer (DAB) Stain Kit

**Description** The AviBond OneStep HRP Polymer Stain Kit is based on proprietary OneStep Technology has been developed to provide the cleanest, most consistent staining available. Developed in the research laboratories of Teomics, the system utilizes a polymerized peroxidase label that eliminates biotin and its' associated background issues from the equation. In addition, this product reduces the steps required for immunohistochemical staining by combining two steps from the traditional Biotin-Streptavidin system. The OneStep technology based Anti- Polyvalent system is effective with antibodies of mouse, rat, rabbit and guinea pig.

**Uses/Limitations** Not to be taken internally.  
For in vitro diagnostic use only.  
Do not use if reagent becomes cloudy.  
Do not use past expiration date.  
Use caution when handling reagents.  
Non-Sterile.

**Test Capacity** 80 Slides

<b>Kit Contents</b>	<b>Catalog</b>	<b>Product</b>	<b>Volume</b>	<b>Storage</b>
	IADA008	PeroxiBlock Ultra	8 ml	2-8° C
	IAAA008	IncrediBlock Advance	8 ml	2-8° C
	IABZ008	OneStep Anti-Polyvalent HRP	8 ml	2-8° C
	IACB003	DAB Clarity Ultra Substrate	3 ml	2-8° C
	IACU005	DAB Clarity Ultra Substrate Buffer	5 ml x 8 vials	2-8° C

<b>Recommended (not included)</b>	<b>Catalog</b>	<b>Product</b>	<b>Volume</b>	<b>Storage</b>
	IHAQ500	Hematoxylin for Automation	500 ml	2-8° C
	IBRT500	Bluing Reagent	500 ml	2-8° C
	ICPL500	Citrate Plus	500 ml	2-8° C

**Precautions** Avoid contact with skin and eyes.  
Harmful if swallowed.  
Follow all Federal, State, and local regulations regarding disposal.

**Procedure**

1. Rehydrate tissue slides.
2. Perform antigen retrieval on tissue according to supplier recommendations.
3. After retrieval, proceed with staining as usual.
4. Apply PeroxiBlock Ultra and incubate slide for 10-15 minutes.
5. Rinse 3 times in buffer.
6. Apply Super Block (AAA), and incubate for 5 minutes at room temperature to block nonspecific background staining. Note:
7. Do not exceed 10 minutes or there may be a reduction in desired stain.
8. Rinse 3 times in buffer.
9. Apply primary antibody and incubate according to manufacturer's protocol.
10. Rinse 3 times in buffer.
11. Apply OneStep Anti-Polyvalent HRP Polymer and incubate for 30 minutes at room temperature.
12. Rinse 3 times in buffer.
13. Rinse 1 time in Distilled/DI water.

*WARNING: DAB is a suspected carcinogen. Handle with care and dispose of according to all regulations.*

14. Add 5 drops (40-50ul each) DAB Clarity Ultra Substrate to each 5ml vial of DAB Clarity Ultra Substrate Buffer, mix by swirling and apply to tissue for 5 minutes.
15. Rinse 1 time in Distilled/DI water.
16. Apply DAB Chromogen/Substrate mixture and incubate for a second 5 minute period.
17. Rinse 3 times in buffer.
18. Apply Hematoxylin for Automation and incubate for 5 minutes.
19. Rinse 3 times in distilled water.
20. Apply Bluing Reagent and incubate for 5 seconds.
21. Rinse immediately in distilled or deionized water.
22. Dehydrate slides and clear in xylene or xylene substitute.
23. Coverslip using a permanent mounting media.

**Troubleshooting****Overstaining**

1. Concentration of the primary antibody was too high or the incubation time was too long.
2. Temperature during incubation was too high.

3. Incubation times were too long.

**Non-Specific Background Staining**

1. Rinsing between steps was inadequate.
2. Tissue was allowed to dry with reagents on.
3. Folds in tissue trapped reagents.
4. Antigen migrated in tissue.
5. Excessive tissue adhesive on slides.
6. Inadequate blocking with protein block.

**Weak Staining**

1. Primary antibody concentration was too low or incubation time was too short.
2. Reagents are past their expiration date.
3. Inadequate removal of wash buffer between steps, resulting in dilution of reagents.
4. Room temperature was excessively cool.
5. The primary antibody does not recognize an antigen that survives fixation and embedding in high enough amounts.
6. Excessive incubation with protein block.

**No Staining**

1. Steps were inadvertently left out.
2. There is no antigen in the tissue.
3. The primary antibody is not of mouse, rat, rabbit or guinea pig origin.
4. Chromogenic substrate has been replaced with another that is not intended for use with peroxidase.
5. One or more components of the kit have been inactivated.