



Stability of HistoMark Components

Purpose:

To evaluate the long-term stability and performance of the components of the HistoMark Staining Systems.

Reagents:

Components of the HistoMark substrate kits were stored at 4°C from the date of manufacture. Samples of each of the following products were compared to freshly produced samples for sensitivity and reactivity.

<u>Reagent</u>	<u>Product Code</u>	<u>Normal Appearance</u>	<u>Minimum Stability</u>
Blocking Solution Concentrate	71-00-10	clear, colorless	4 years
Activator Solution	71-00-01	clear to pale yellow	3.5 years
Buffered Substrate Solution	71-00-04	clear to pale yellow	1 year
Peroxide Solution	71-00-09	clear, colorless	4 years
DAB	71-00-08	light brown	3 years
DAB-C	71-00-13	light brown	4 years
Enhance BLACK	71-00-12	light pink	4 years
Enhance ORANGE	71-00-07	light green	4 years
PhThalo RED	71-00-02	yellow to light green	4 years
PhThalo BLUE	71-00-03	light pink or brown	2 years
Contrast RED	71-00-05	pale red	3 years
Contrast BLUE	71-00-06	red to purple	2.5 years
Contrast GREEN	71-00-11	blue-green	4 years

Test Parameters:

The reagents were evaluated on tissue sections as follows:

1. Deparaffinize and rehydrate tissue sections as recommended.
2. Equilibrate slides in Tris-HCl buffer for a minimum of ten minutes.
3. If HRP reagents are to be tested, block for endogenous peroxidase for four minutes with a 1:10 dilution of Blocking Solution. Wash with Tris-HCl buffer for a minimum of five minutes.
4. Incubate section with Normal Serum Block for ten minutes.
5. Incubate with primary antibody for ten minutes. Wash with Tris-HCl for five minutes.
6. Incubate with biotinylated secondary antibody for ten minutes. Wash with Tris-HCl for five minutes.
7. Incubate with AP or HRP Streptavidin for ten minutes. Wash with Tris-HCl for five minutes.
8. Follow the appropriate staining procedure for AP or HRP reagents. Coverslip and allow to dry.
9. Compare results of test and control reagents.

Results/Conclusions:

Each component was found on the test date to be equivalent in sensitivity and reactivity to a freshly produced lot of the same reagent. All reagents except Buffered Substrate Solution were shown to be stable for a minimum of two years from the date of manufacture when stored at 4°C. All components conformed to expected visual appearance characteristics, as listed in the table above. None of the reagents contained more than a light precipitate.