ReadiUse™ Stayright™ Purple *HRP Chromogen Premixed with Hydrogen Peroxide*

Catalog number: 45900, 45901
Unit size: 5 mL, 50 mL

Component	Storage	Amount	
		Cat No. 45900	Cat No. 45901
ReadiUse™ Stayright™ Purple Peroxidase (HRP) Substrate	Refrigerate (2-8 °C), Minimize light exposure	1 bottle (5 mL)	1 bottle (50 mL)

OVERVIEW

3,3\'-Diaminobenzidine (DAB) has been used as the most commonly used IHC chromogen because it is inexpensive and sensitive for routine applications. However, DAB has been shown to be mutagenic and hazardous to laboratory workers and the environment. In order to address this issue, AAT Bioquest has developed this novel Stayright™ Purple as a significantly safer IHC chromogen than DAB. Furthermore, Stayright™ Purple provides a rapid and simple method to develop clean and intense purple stain in the presence of HRP with high sensitivity as DAB. The ready-to-use Stayright™ Purple HRP substrate also shows non-mutagenic effects with minimal cytotoxicity. ReadiUse™ Stayright™ Purple Peroxidase (HRP) Substrate is suitable for use in peroxidase (HRP)-based immunohistochemistry (IHC) and in situ hybridization (ISH) staining methods. The substrate is a stable pre-mixed solution containing hydrogen peroxide so all mixing steps are eliminated and is ready to use. Upon HRP-induced oxidation, Stayright™ Purple forms a purple insoluble precipitating product at the target site of your assay. The purple end product is insoluble in organic solvents and organic mounting media, thus the distinct purple stain can maintain through regular dehydration and coverslipping steps.

AT A GLANCE

Protocol Summary

1. Apply ready-to-use Stayright™ Purple solution to tissue section.
2. Incubate tissue section for 5-15 minutes.
3. Rinse tissue for 5-10 minutes, counterstain.
4. Add mounting medium to cover the section.

KEY PARAMETERS

Instrument: Light microscope
Instrument specification(s): White light

SAMPLE EXPERIMENTAL PROTOCOL

1. Cover section with the ready-to-use Stayright™ Purple solution. Incubate at room temperature for 5-15 minutes.
2. Immerse slides in dH_2O to stop the color development and monitor the staining intensity. If the staining intensity is not bright enough, longer incubation is needed. One can re-apply the Stayright™ Purple solution to continue the development.
3. Wash with dH_2O for 5-10 minutes.
4. Use a desired counterstain if needed.
5. Dehydrate with ethanol and permanently mount in organic permanent mounting medium.

Note For guidelines on sample preparation, please visit https://www.aatbio.com/resources/guides/paraffin-embedded-tissue-immunohistochemistry-protocol.html

EXAMPLE DATA ANALYSIS AND FIGURES

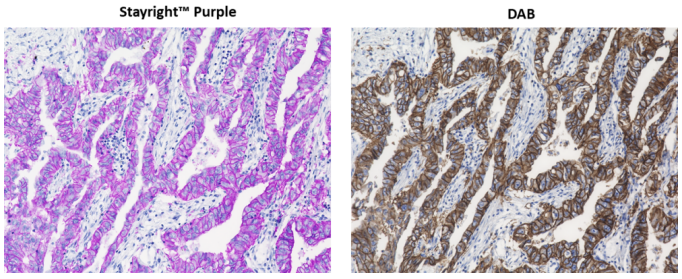

Figure 1. Immunohistochemical detection of EpCAM in FFPE lung adenocarcinoma tissue. The tissue sections were incubated with poly-HRP conjugated Goat anti-Rabbit IgG and then developed with Stayright™ Purple (Left) or DAB (Right), respectively. Cells were also counterstained with hematoxylin. Stayright™ Purple generates an intense stain with high sensitivity and clear resolution similar as DAB.

DISCLAIMER