# **NeoPATH Pro Background Punisher**

Protein Blocking Reagent 902-10029-031125



Available Product Formats	vailable Product Formats	
Catalog Number	Volume	
NPRR10029T40	40 Tests	

## Intended Use:

For Research Use Only. Not for use in diagnostic procedures.

## **Background Information:**

NeoPATH Pro Background Punisher is used to reduce background staining caused by non-specific protein binding that is often observed with immunohistochemistry. NeoPATH Pro Background Punisher is specifically formulated for pH stability and is sodium azide and thimerosal free. It can be used with automated or manual staining protocols.

## **Known Applications:**

Immunohistochemistry (Formalin-fixed paraffin-embedded tissues)

#### **Materials and Methods:**

Reagents Provided:

Kit Catalog No. Component Description		Quantity x Volume
NPRR10029T40	NeoPATH Pro Background Punisher	1 x 14 mL

\* Refer to the Biocare Medical website located at http://biocare.net for information regarding catalog numbers and ordering.

#### Supplied As:

Buffered saline solution, contains Purified Casein, pH 7.5 – 7.7, and less than 0.1% ProClin 950 preservative. See Safety Data Sheet for additional details.

#### **Reconstitution, Dilution and Mixing:**

The NeoPATH Pro Background Punisher reagent is optimized and ready to use with Biocare antibodies and ancillary reagents. No reconstitution, mixing, dilution, or titration is required.

## Storage and Stability:

Store at 2°C to 8°C. The product is stable to the expiration date printed on the vial label when stored under these conditions. Do not use after expiration date. Storage under any condition other than those specified must be verified. The reagent is ready-to-use and should not be diluted. The stability of user diluted reagent has not been established by Biocare.

#### Staining Protocol Recommendations:

Below are programming and protocol recommendations to assist the user when staining manually and/or using one of Biocare's Automated Staining Platforms for research applications. The user is responsible for further optimizations of the protocol.

NeoPATH Pro Background Punisher is provided in vials ready for use on the NeoPATH Pro Automated Slide Stainer. Uncap the vial and place in the NeoPATH Pro reagent tray. The NeoPATH Pro Automated Slide Stainer will apply reagent as required in the selected protocol.

Refer to the appropriate antibody data sheet for the recommended staining protocol. Refer to the NeoPATH Pro Automated Slide Staining System User Manual for detailed instructions on instrument operation and additional protocol options.

### **Technical Notes:**

A slight turbidity may be observed. Invert 2-3 times before use.
NeoPATH Pro Background Punisher is a very strong blocker, and in most cases, should not remain on the tissue for more than 15 minutes.

#### Limitations:

This product is provided for Research Use Only (RUO) and is not for use in diagnostic procedures. Suitability for specific applications may vary and it is the responsibility of the end user to determine the appropriate application for its use.

#### **Precautions:**

1. Kit reagent(s) contain less than 0.1% sodium azide. Concentrations less than 0.1% are not reportable hazardous materials according to U.S. 29 CFR 1910.1200, OSHA Hazard communication and EC Directive 91/155/EC. Sodium azide (NaN<sub>3</sub>) used as a preservative is toxic if ingested. Sodium azide may react with lead and copper plumbing to form highly explosive metal azides. Upon disposal, flush with large volumes of water to prevent azide build-up in plumbing. (Center for Disease Control, 1976, National Institute of Occupational Safety and Health, 1976)<sup>1</sup>

2. Handle materials of human or animal origin as potentially biohazardous and dispose of such materials with proper precautions. In the event of exposure, follow the health directives of the responsible authorities where used.<sup>2,3</sup>

3. 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 into contact with sensitive areas, wash with copious amounts of water.<sup>4</sup>

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 vial.

7. To prevent evaporation and ensure maximum test capacity, promptly cap and remove reagents from automated instruments after each run. Leaving reagents exposed can reduce their effectiveness and the number of tests they can provide. Always store reagents as directed to maintain their integrity.

8. The reagent is optimized for use with Biocare antibodies and ancillary reagents. Refer to the primary antibody and other ancillary reagent instructions for use for recommended protocols and conditions for use.

9. Dispose of all used reagents and any other contaminated disposable materials following procedures for infectious or potentially infectious waste. It is the responsibility of each laboratory to handle solid and liquid waste according to their nature and degree of hazardousness and to treat and dispose of it (or have them treated and disposed of) in accordance with any applicable regulations.

10. Follow local disposal regulations for your location along with recommendations in the Safety Data Sheet to determine the safe disposal of this product

11. The SDS is available upon request and is located at http://biocare.net.

12. Report any serious incidents related to this device by contacting the local Biocare representative and the applicable competent authority of the Member State or country where the user is located.

This Reagent contains components classified as indicated in the table below in accordance with Regulation (EC) No. 1272/2008.

Hazard	Code	Hazard Statement
	H317	May cause an allergic skin reaction

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#### **Technical Support:**

Contact Biocare's Technical Support at 1-800-542-2002 for questions regarding this product.

## Troubleshooting Guide:

1. No staining of any slides – Check to determine appropriate positive control tissue, antibody, and detection products have been used. Check for incomplete or improper wax removal or pretreatment.

2. Weak staining of all slides – Check to determine appropriate positive control tissue, antibody, and detection products have been used.

3. Excessive background of all slides – There may be high levels of excess non-specific protein interaction (use a protein block, such as serum- or casein-based blocking solution).

4. Tissue sections wash off slides during incubation – Check slides to ensure they are positively charged.

5. Specific staining too dark – Check protocol to determine if proper antibody titer was applied to slide, as well as proper incubation times for all reagents. Additionally, ensure the protocol has enough washing steps to remove excess reagents after incubation steps are completed.

#### **References:**

1. Center for Disease Control Manual. Guide: Safety Management, NO. CDC-22, Atlanta, GA. April 30, 1976 "Decontamination of Laboratory Sink Drains to Remove Azide Salts.

 Occupational Safety and Health Standards: Occupational exposure to hazardous chemicals in laboratories. (29 CFR Part 1910.1450). Fed. Register.
Directive 2000/54/EC of the European Parliament and Council of 18 September 2000 on the protection of workers from risks related to exposure to biological agents at work.

4. Clinical and Laboratory Standards Institute (CLSI). Protection of Laboratory Workers from Occupationally Acquired Infections; Approved Guideline-Fourth Edition CLSI document M29-A4 Wayne, PA 2014.

