

# Deep Space Black™ Chromogen Kit

## Chromogen Kit

Control Number: 901-BRI4015-082517

**Catalog Number:** BRI4015 H, L

**Description:** 25, 100 ml

**Intended Use:**

For In Vitro Diagnostic Use

**Summary & Explanation:**

Deep Space Black™ (DSB) is a novel permanent chromogen that produces a dark grey to black stain in the presence of horseradish peroxidase (HRP). The kit consists of liquid Deep Space Black Chromogen and Buffer that are stable for 8 hours at room temperature once mixed. Deep Space Black™ is clearly distinguishable from Warp Red™, DAB, Vina Green™ and Ferangi Blue™ on a single slide, enabling high flexibility for its application in Multiplex IHC™ and double stains. Deep Space Black is suitable for both immunohistochemistry (IHC) and *in situ* hybridization applications including HPV, CMV, EBV, Kappa, Lambda, p63, HMWCK, TTF-1, Ki-67, and other targets/antigens such as cytokeratins, melanoma, and basal and myoepithelial cells.

The reaction product is insoluble in alcohols and xylene and, therefore, a variety of counterstains and permanent mounting media can be used with this chromogen kit.

**Known Applications:**

Immunohistochemistry (formalin-fixed paraffin-embedded tissues)

*In-situ* hybridization (ISH)

**Supplied As:**

**25 ml Kit**

Deep Space Black™ Chromogen (BRI4014C) 1 x 1ml

Deep Space Black™ Buffer (BRI4013H) 1 x 25ml

Dropper Bottle (DB4015)

Mixing Vial (RMVL103)

**100 ml Kit**

Deep Space Black™ Chromogen (BRI4014C) 4 x 1ml

Deep Space Black™ Buffer (BRI4013H) 4 x 25ml

Dropper Bottle (DB4015)

Mixing Vial (RMVL103)

**Materials and Reagents Needed But Not Provided:**

Microscope slides, positively charged

Desert Chamber\* (Drying oven)

Positive and negative tissue controls

Xylene (Could be replaced with a Xylene substitute\*)

Ethanol or reagent alcohol

Decloaking Chamber\* (Pressure cooker)

Deionized or distilled water

Wash buffer\*

Pretreatment reagents\*

Enzyme digestion\*

Avidin-Biotin Blocking Kit\*(Labeled streptavidin kits only)

Peroxidase block\*

Protein block\*

Primary antibody\*

Negative control reagents\*

Detection kits\*

Hematoxylin\*

Bluing reagent\*

Mounting medium\*

\* Biocare Medical Products: Refer to a Biocare Medical catalog for further information regarding catalog numbers and ordering information. Certain reagents listed above are based on specific application and detection system used.

**Species Reactivity:**

N/A

**Storage and Stability:**

Store at 2°C to 8°C. Do not use after expiration date printed on vial. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user.

**Protocol Recommendations:**

1. After application of HRP detection, rinse tissue section in TBS or PBS wash buffer.
2. Add 1 drop (32µl) of Deep Space Black Chromogen (BRI4014) to 1ml of Deep Space Black Buffer (BRI4013) and mix well.
3. Apply Deep Space Black working solution to tissue sections. Incubate for 3-5 minutes at room temperature.
4. After Deep Space Black staining, wash in water and lightly stain with hematoxylin or other appropriate counterstain (e.g. Nuclear Fast Red).
5. Oven dry or dehydrate sections, clear and coverslip.

**Protocol Notes:**

1. Deep Space Black can be used with Warp Red, DAB, Vina Green and Ferangi Blue for Multiplex IHC procedures.
2. The Deep Space Black working solution is stable for at least 8 hours at room temperature. Deep Space Black has been tested up to 24 hours post-preparation with minimal reduction in staining intensity.
3. An increasing intensity of the Deep Space Black reaction product can be achieved with incubations longer than 5 minutes; however, an increase in background staining may result.

**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 Biocare 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.

**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](http://www.clsi.org)). 2011

**Precautions:**

Deep Space Black Chromogen is dissolved in methanol and may cause skin or eye irritation. Avoid contact with skin and eyes. If contact occurs, flush affected area with copious amounts of water. Seek medical attention if necessary.

Deep Space Black Buffer is not classified as hazardous. The preservative used in this reagent is Proclin 950 and the concentration is less than 0.25%. Overexposure to Proclin 950 or chromogen can cause skin and eye irritation and irritation to mucous membranes and upper respiratory tract. The concentration of Proclin 950 in this product does not meet the OSHA criteria for a hazardous substance. Wear disposable gloves when handling reagents.

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 in contact with sensitive areas, wash with copious amounts of water. Microbial contamination of reagents may result in an increase in nonspecific staining. Incubation times or temperatures other than those specified may give erroneous results. The user must validate any such change. The MSDS is available upon request and is located at <http://biocare.net/support/msds/>. Consult OSHA, federal, state or local regulations for disposal of any toxic substances. Proclin™ is a trademark of Rohm and Haas Company, or of its subsidiaries or affiliates.

**Troubleshooting:**

Follow the reagent specific protocol recommendations according to data sheet provided. If atypical results occur, contact Biocare's Technical Support at 1-800-542-2002.

**Limitations & Warranty:**

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