

## Vulcan Fast Red Chromogen Kit 2

Chromogen  
902-805A-072425



| Available Product Formats |        |
|---------------------------|--------|
| Catalog Number            | Volume |
| BRR805AG7                 | 7.0 mL |
| BRR805AH                  | 25 mL  |
| BRR805AG90                | 90 mL  |
| BRR805AS                  | 100 mL |
| BRR805AM                  | 500 mL |
| BRR805A5L                 | 5 L    |
| BRR805AG7                 | 7.0 mL |
| BRR805AH                  | 25 mL  |
| BRR805AG90                | 90 mL  |

### Intended Use:

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

### Background Information:

Vulcan Fast Red Chromogen Kit 2 is a well-established chromogen used in IHC staining protocols that in the presence of an alkaline phosphatase (AP) enzyme, produces a fuchsin-red precipitate that is insoluble in organic solvents and can be coverslipped with a permanent mounting media.

### Known Applications:

Immunohistochemistry (Formalin-fixed paraffin-embedded tissues)

### Materials and Methods:

#### Reagents Provided:

| Kit Catalog No. | Component Catalog No. | Component Description     | Quantity x Volume |
|-----------------|-----------------------|---------------------------|-------------------|
| BRR805AG7       | BRR805BE              | Vulcan Fast Red Chromogen | 1 x 1.5 mL        |
|                 | BRR805CH              | Vulcan Fast Red Buffer    | 1 x 7.0 mL        |
| BRR805AH        | BRR805BE              | Vulcan Fast Red Chromogen | 1 x 0.7 mL        |
|                 | BRR805CH              | Vulcan Fast Red Buffer    | 1 x 25 mL         |
| BRR805AG90      | BRR805B-4.5           | Vulcan Fast Red Chromogen | 2 x 4.5 mL        |
|                 | BRR805C-90            | Vulcan Fast Red Buffer    | 1 x 90 mL         |
| BRR805AS        | BRR805BC              | Vulcan Fast Red Chromogen | 2 x 1.0 mL        |
|                 | BRR805CL              | Vulcan Fast Red Buffer    | 1 x 100 mL        |
| BRR805AM        | BRR805BB              | Vulcan Fast Red Chromogen | 5 x 1.6 mL        |
|                 | BRR805CL              | Vulcan Fast Red Buffer    | 5 x 100 mL        |
| BRR805A5L       | BRR805B-80            | Vulcan Fast Red Chromogen | 1 x 80 mL         |
|                 | BRR805CO              | Vulcan Fast Red Buffer    | 2 x 2.5 L         |

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

### Supplied As:

#### Vulcan Fast Red Chromogen – BRR805B

Acidic solution with 0.2N Hydrochloric Acid. See Safety Data Sheet for additional details.

#### Vulcan Fast Red Buffer – BRR805C

Buffered solution, pH 8.3 – 8.4, 0.125% ProClin 950 preservative. See Safety Data Sheet for additional details.

### Reconstitution, Dilution and Mixing:

The Vulcan Fast Red Chromogen Kit 2 is optimized for use with Biocare antibodies and ancillary reagents and must be diluted just prior to use. Apply

the solution within 30 minutes of preparation. Add 1 drop of Vulcan Fast Red chromogen with 2.5 mL of Vulcan Fast Red buffer. Mix Well.

### 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. Vulcan Fast Red mixture is stable for 20-30 minutes only. Diluted reagents should be used as instructed. The stability of user diluted reagents 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.

1. Mix Vulcan Fast Red Chromogen gently by inverting several times.
2. Add 1 drop of Vulcan Fast Red Chromogen to 2.5ml of Vulcan Fast Red Buffer. Mix well.
3. Rinse tissue with TBS Wash Buffer.
4. Apply the Vulcan Fast Red mixture to the tissue section. Incubate for 10 to 15 minutes.
5. Rinse tissue with deionized (DI) water.
6. Counterstain in hematoxylin. Rinse in DI water.
7. Blue nuclei in TBS Wash Buffer for 1 minute. Wash in tap water.
8. Dehydrate rapidly in 3 changes of 100% alcohol and clear in 2 changes of xylene.
9. Mount and coverslip with permanent mounting medium.

### Technical Notes:

1. Use TBS for washing steps. PBS should never be used. Phosphates act as a competitive inhibitor to alkaline phosphatase enzymes.
2. Vulcan Fast Red Buffer may exhibit slight cloudiness and/or precipitate; mix thoroughly before use.
3. Vulcan Fast Red Chromogen may exhibit precipitate; product performance is not affected.
4. Vulcan Fast Red is highly fluorescent and is resistant to fading. Use with a Texas Red filter.
5. Vulcan Fast Red can be used with DAB for double stain procedures.
6. For increased staining intensity, a double application of Vulcan Fast Red (2 x 10 minutes) can be performed.
7. Hydrogen peroxide block does not inhibit Fast Red staining and improves staining contrast.
8. Acetone can be used to reduce Vulcan Fast Red over staining.
9. Prolonged use of absolute alcohol or xylene after Fast Red staining may cause fading.
10. Biocare recommends American Master Tech (Lodi California) Reagent Grade Alcohol (methanol free).
11. If fading is observed, Biocare recommends air dry slides after hematoxylin and bluing. Use Biocare's Desert Chamber drying oven at 60°C for 15-30 minutes. After drying, place slides in analytical grade xylene and coverslip.
12. Note: To clean the mixing vial and/or dropper bottle, rinse with 70% alcohol and then wash in several changes of deionized water.

### 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:



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Tel: 800-799-9499 | [www.biocare.net](http://www.biocare.net) | Fax: 925-603-8080

## Vulcan Fast Red Chromogen Kit 2

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1. Vulcan Fast Red Chromogen is mildly corrosive 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.
2. Kit reagents contain less than 0.05% ProClin 300 and/or less than 1% ProClin 950. Wear gloves and protective clothing and take reasonable precautions when handling as ProClin is classified as an irritant and may cause skin contact sensitization. Avoid contact with eyes, skin, and mucous membranes.
3. 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>
4. 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>
5. Microbial contamination of reagents may result in an increase in nonspecific staining.
6. Incubation times or temperatures other than those specified may give erroneous results. The user must validate any such change.
7. Do not use reagent after the expiration date printed on the vial.
8. 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.
9. 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.
10. 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.
11. Follow local disposal regulations for your location along with recommendations in the Safety Data Sheet to determine the safe disposal of this product
12. The SDS is available upon request and is located at <http://biocare.net>.
13. 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 Vulcan Fast Red Chromogen Kit 2 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.                                                                                                                            |
|  | H290<br>H314<br>H318<br>H335<br>H401 | May be corrosive to metals.<br>Causes severe burns and eye damage.<br>Causes serious eye damage.<br>May cause respiratory irritation.<br>Toxic to aquatic life. |

### Technical Support:

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



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### References:

1. Occupational Safety and Health Standards: Occupational exposure to hazardous chemicals in laboratories. (29 CFR Part 1910.1450). Fed. Register.
2. 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.
3. 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.