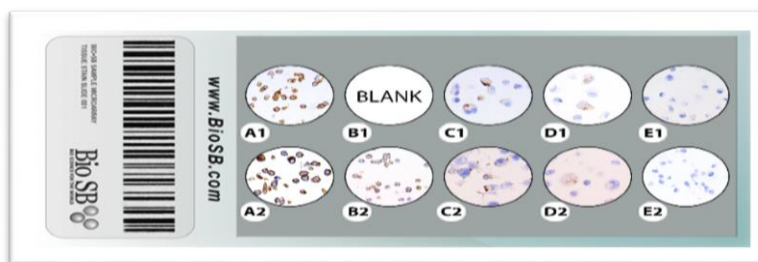


HER-2 neu PolyDetector HRP/DAB Detection System



Intended Use *For Research Use Only*

Summary And Explanation The HER-2 neu PolyDetector HRP/DAB Detection System is a non-biotin, 2-step polymeric detection system that allows for the Immunohistochemical detection of HER-2 neu overexpression. The HER-2 neu PolyDetector HRP/DAB Detection System has been developed using a proprietary tandem hyperlabelling technology used to directly label immunoglobulins with enzymes. This ensures consistent and reproducible immunostaining for HER-2 neu. Included in the kit are slides of formalin-fixed paraffin-embedded breast tissues or cells that display 0, 1+, 2+ or 3+ positivity that enable the user to quantify the HER2 neu expression in tested samples.

The HER-2 neu or c-erbB-2 oncoprotein is in the epidermal growth factor receptor family. These receptors are overexpressed in various adenocarcinomas including that from the gastrointestinal tract, ovary, and up to 30% of breast carcinomas.

Presentation The **HER-2 neu PolyDetector HRP/DAB Detection System** contains a rabbit monoclonal HER-2 neu prediluted antibody RBT-HER2, prediluted rabbit negative control, positive breast tissue control slides, ImmunoRetriever with Citrate heat epitope retrieval solution, Peroxidase Blocker solution, an Anti-Rabbit Horseradish Peroxidase solution, a DAB Buffer and a DAB Chromogen solution. All the components are buffered and contain proteins, stabilizers and a non-azide anti-microbial.

| Availability | Component Name | Catalog Number | | |
|--------------|---|------------------------|-------------------------|-------------------------|
| | | BSB 0245 (70 Tests) | BSB 0246 (150 Tests) | BSB 0247 (500 Tests) |
| | Rabbit Monoclonal HER-2 neu Prediluted Antibody | 7 mL | 15 mL | 50 mL |
| | Rabbit Negative Control | 7 mL | 15 mL | 50 mL |
| | 9-Core HER-2 Cell Line Microarray | 5 Slides | 10 Slides | 30 Slides |
| | 20X ImmunoRetriever with Citrate | 50 mL | 100 mL | 200 mL |
| | PolyDetector Peroxidase Blocker | 15 mL | 30 mL | 100 mL |
| | PolyDetector HRP Label | 15 mL | 30 mL | 100 mL |
| | PolyDetector DAB Buffer | 15 mL | 30 mL | 100 mL |
| | PolyDetector DAB Chromogen | 1 mL | 3 mL | 6 mL |

Storage Store at 2-8°C

Stability Stable up to the expiration date listed on the product label.

Do not use this product after the expiration date listed on the product label.

Protocol

Preparation of Working Solutions

The **Prediluted HER-2 neu Rabbit Antibody**, **Prediluted Rabbit Negative Control**, **PolyDetector Peroxidase Blocker**, and **Anti-Rabbit Horseradish Peroxidase Label** are ready-to-use working solutions and require no further preparation. The **20X ImmunoRetriever with Citrate** needs to be diluted with distilled water to a 1X concentration before use by adding 50 mL of 20X ImmunoRetriever with Citrate to 950 mL of distilled water and mixing. The **DAB Chromogen** is concentrated and needs to be diluted and mixed into the **DAB Buffer** to produce the working DAB substrate-chromogen solution. For each 1 mL of working DAB substrate-chromogen solution required for the experiment, 1 drop of **DAB Chromogen** should be added and mixed into 1 mL of **DAB Buffer**.

| Working DAB Substrate-Chromogen Required | 1 mL | 2 mL | 3 mL |
|--|--------|---------|---------|
| DAB Buffer | 1 mL | 2 mL | 3 mL |
| DAB Chromogen | 1 drop | 2 drops | 3 drops |

Recommended Immunohistochemical Protocol

1. Deparaffinize and rehydrate tissues if necessary.
2. Place cut and dried slides in the prepared **1X ImmunoRetriever Citrate** and heat treat for 15 minutes in a pressure cooker or 45 minutes in a water bath or steamer 95°C -98°C.
3. Wash with 5 changes of IHC Wash buffer.
4. Cover tissue with the **PolyDetector Peroxidase Blocker** for 5 min.
5. Wash with 3 changes of IHC wash buffer.
6. Cover tissue with the HER-2 neu Primary Antibody or Negative Control and incubate for 45 minutes.
7. Wash with 3 changes of IHC wash buffer.
8. Cover tissue with the PolyDetector HRP Label, incubate for 45 min.
9. Rinse with 3 changes of IHC wash buffer.
10. Prepare DAB by adding one drop of **PolyDetector DAB Chromogen** per 1 mL of **PolyDetector DAB Buffer** and mix.
11. Cover tissue with the prepared DAB substrate-chromogen solution, incubate for 10 min.
12. Rinse with 5 changes of DI water
13. Counterstain and then dehydrate.
14. Coverslip.

Abbreviated Immunohistochemical Protocol

| Step | PolyDetector HRP |
|-------------------------|-------------------------------|
| Peroxidase Blocker | 5 minutes |
| Primary Antibody | 45 minutes |
| HRP Label | 45 minutes |
| DAB Substrate-Chromogen | 10 minutes |
| Counterstaining | Time varies with counterstain |

Interpretation of Expected Results with 9-Core HER-2 Cell Line Microarray

| | | | | |
|---|---|--|--|---|
| A1 HER2 3+ (Metastatic Breast Cancer from pleural effusion) | B1 BLANK | C1 HER2 1+ (Metastatic Ductal Breast Cancer from pleural effusion) | D1 HER2 + (Breast Carcinoma) | E1 HER2 Negative Control (Metastatic Breast Cancer from pleural effusion) |
| A2 HER2 3+ (Ductal Breast Cancer) | B2 HER2 2+ (Metastatic Breast Cancer from pericardial effusion) | C2 HER2 1+ (Metastatic Prostate Cancer from Lymph Node) | D2 HER2 + (Metastatic Breast Cancer from pleural effusion) | E2 HER2 Negative Control (Metastatic Breast Cancer from pleural effusion) |







Precautions

1. For professional users only. Results should be interpreted by a medical professional.
2. Always wear proper personal protective equipment such as laboratory coat, goggles and gloves when handling reagents.
3. Minimize microbial contamination of reagents.
4. Dispose of unused solution with copious amount of water.
5. Do not ingest reagent. If reagent is ingested, contact a poison control center immediately.
6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
7. For complete recommendations for handling biological specimens please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (1).

References

1. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement / Vol. 61, January 6, 2012.

Symbol Key / Légende des symboles/Erläuterung der Symbole

| | | |
|--|--|--|
|  Storage Temperature Limites de température Zulässiger temperaturbereich |  Manufacturer Fabricant Hersteller |  Catalog Number Référence du catalogue Bestellnummer |
|  Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten |  Expiration Date Utiliser jusque Verwendbar bis |  Lot Number Code du lot Chargenbezeichnung |



Bio SB
BIOSCIENCE FOR THE WORLD

Bio SB, Inc. • 69 Santa Felicia Dr., Santa Barbara, CA 93117, USA.
Tel. (805) 692-2768 • Tel. (800) 561-1145 • Fax. (805) 692-2769
• E-mail: info@biosb.com • Website: www.biosb.com