

## Monoclonal Antibody to C-erb-B2 (HER-2 neu) Oncoprotein

### *Specification & Information Sheet*

#### Reagent Category

Monoclonal primary antibody to  
C-erb-B2 Oncoprotein

#### Antibody Formats Supplied

- 7 ml of anti c-erb-B2, Ready-To-Use
- 0.5 ml of anti c-erb-B2, Concentrate

ITEM#: IMI17961E (Ready-To-Use)

ITEM#: IMI17952E (Concentrate)

---

**SOURCE:** Mouse ascites fluid

**IMMUNOGLOBULIN ISOTYPE:** IgG1

**CLONE:** CB-11

**IMMUNOGEN:** purified c-erb-B2 Oncoprotein

#### **SPECIFICITY**

C-erb-B2 or HER-2/neu Oncoprotein is a gene product that has been shown to be amplified in a variety of adenocarcinomas such as in breast, ovary and gastrointestinal tracts. The gene amplification of c-erb-B2 directly correlates with Immunohistochemical staining and can be detected in frozen or paraffin sections. This CB11 antibody has been shown to bind specifically to c-erb-B2 Oncoprotein from SKB-3 cells by immunoprecipitation.

#### **REACTIVITY**

C-erb-B2 antibody reacts with the gene product of c-erb-B2 oncogene that upon amplification increases in protein mass and accumulates at the cell membrane. The increased cytoplasmic staining often seen with c-erb-B2 amplification and over-expression is a characteristic of c-erb-B2 staining and it is not to be assumed for background staining. This antibody is suitable for use on alcohol or acetone fixed cryostat (frozen) sections as well as for routinely fixed paraffin embedded and frozen sections. (See special usage guidance of this data sheet).

**POSITIVE CONTROL TISSUE:** Breast Carcinoma

**STAINING PATTERN:** Membrane staining

#### **Antibody FORMATS, DILUTIONS and INCUBATIONS**

Affinity purified c-erb-2 monoclonal mouse is provided in phosphate buffered saline pH 7.4 containing bovine serum albumin (BSA) and 0.1% sodium azide. This antibody is available in:

- 7 ml of pre-titered, Ready-to-Use:** *Do not dilute.* Incubate for 10 minutes for frozen sections and 30 minutes for paraffin sections.

The above dilutions and incubation times were derived by the use of Innovex STAT-Q detection systems. For less sensitive detection systems these dilution factors may vary and they should be determined by the end user for specific detection system employed.

## **SPECIAL USAGE GUIDANCE**

The use of **Innovex signal enhancing wash buffer** (Item#: IMI00396E for Immuno-Peroxidase staining and Item#: IMI00596E for Immuno-Alkaline-phosphatase) or heat application (retrieval procedure) is highly recommended when immunostaining paraffin sections. The use of Innovex Signal Enhancing Wash buffer in place of PBS or Tris buffer for the rinsing steps in between the incubation steps greatly enhances staining signals for antigenically weak tissues or for over fixed tissues. Its use further eliminates the need for enzyme Pre-digestion, heat application (retrieval procedure), long incubation of primaries and repetitive procedures.

If using heat to recover antigens. Tissue recovery solution (Innovex Product # NB304), is recommended for its pH remains unchanged by increase in temperature and as a result no damage to morphology occurs.

## **APPLICATIONS**

This antibody is intended for use in immunolocalization of c-erb-B2 Oncoproteins by variety of immunoassays such as Immunochemistry, ELISA, Immunoblotting and dot blotting. In immunochemistry, this antibody can be used in staining routinely fixed paraffin embedded or frozen histological sections of human or animal tissues for the purpose of qualitative or quantitative localization of c-erb-B2 Oncoproteins. This antibody can also be used for quantitative flow cytometric assays in the indirect method.

## **SPECIES REACTIVITY**

This antibody is reactive with human tissues has been substantiated; other species reactivity may be determined by the end user.

## **STORAGE CONDITIONS**

Store in refrigerator at 2-8°C if product will be used routinely. For long term storage, aliquot in small and practical volumes and freeze at 20-70°C. Avoid multiple freeze-thaw cycles which can greatly reduce antibody performance and stability.

## **IMPORTANT NOTE:**

**The interpretation of test results is the sole responsibility of the end user.**

## ***FOR IN VITRO RESEARCH USE ONLY***

## **REFERENCES**

Wright, C., et al. Relationship between c-erb-2 oncoprotein expression and response to endocrine therapy in advanced breast cancer. British. J. Cancer. 65: 118-12, 1992.

Corbett, I, et al. NCL-CB11: A new monoclonal antibody recognizing the internal domain of c-erb-2 oncogene protein, effective for use on formalin fixed, paraffin embedded tissue. J. Pathol. 161: 15-25, 1990

Slamon, D.J., et al. Human breast cancer: correlation of relapse and survival with amplification of HER-2/neu oncogene. Science 237177-182, 1987.

## **FOR ADDITIONAL TECHNICAL SUPPORT:**



American MasterTech

scientific laboratory supplies

POST OFFICE BOX 2539 LODI, CALIFORNIA 95241 TELEPHONE: 1 (800) 860 4073 FACSIMILE: 1 (209) 368 4136