Purified Mouse Anti-Human c-ErbB-2

**Product Information**

- Material Number: 554299
- Size: 0.1 mg
- Concentration: 0.5 mg/ml
- Clone: 3B5
- Immunogen: Human c-erbB-2 aa. 1242-1255
- Isotype: Mouse IgG1
- Reactivity: QC Testing: Human
- Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

**Description**

C-erbB-2 (also known as HER2/neu), a 185 kDa transmembrane glycoprotein, is a member of the type 1 growth factor receptor subfamily which also includes c-erbB-3, c-erbB-4 and the epidermal growth factor receptor (EGFR), also known as c-erbB-1. Members of this receptor subfamily mediate the proliferation and differentiation of normal cells. They have a common structure consisting of an extracellular domain, a transmembrane region, and a cytoplasmic sequence. The extracellular regions contain two cysteine-rich domains, and the intracellular regions have sequence homology to known tyrosine kinases. C-erbB-2 reactivity has been detected in proximal kidney tubules, mucosal epithelium in the gastrointestinal tract, and squamous epithelium in skin. Most normal adult tissues show little or no reactivity with antibodies against c-erbB-2. However, c-erbB-2 is overexpressed in many human breast, stomach, ovary and bladder carcinomas. EGFR, c-erbB-3 and c-erbB-4 are also overexpressed in various human tumor cells, and it is thought that aberrant activation of type 1 growth factor kinase activities may contribute to tumor progression.

The antibody 3B5 recognizes human c-erbB-2. A synthetic peptide corresponding to amino acids 1242-1255 (TAENPEYLGLDVPV) in the C-terminal domain of human c-erbB-2 was used as immunogen.

**Preparation and Storage**

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Store undiluted at 4°C.

**Application Notes**

**Application**

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<th>Routine</th>
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<tbody>
<tr>
<td>Western blot</td>
<td>Routinely Tested</td>
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<tr>
<td>Immunohistochemistry-paraffin</td>
<td>Tested During Development</td>
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<tr>
<td>Immunohistochemistry-frozen</td>
<td>Reported</td>
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<tr>
<td>Immunoprecipitation</td>
<td>Reported</td>
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**Recommended Assay Procedure:**

Applications include immunoprecipitation (1-2 µg/one million cells), western blot analysis (1-2 µg/ml), and immunohistochemistry of frozen and formalin-fixed paraffin-embedded tissue sections (5-20 µg/ml). Positive control cell lines include MCF7 cells (ATCC HTB 22) and SK-BR-3 (ATCC HTB 30) human breast carcinoma cells.
## Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
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<tbody>
<tr>
<td>611548</td>
<td>MCF7 Cell Lysate</td>
<td>500 µg</td>
<td>(none)</td>
</tr>
<tr>
<td>554002</td>
<td>HRP Goat Anti-Mouse Ig</td>
<td>1.0 ml</td>
<td>(none)</td>
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## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

## References


